

AMATEUR RADIO

JANUARY 1962



Vol. 36, No. 1



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OUR COVER

A new layout and a typical photo
of Amateur Radio!

Happy New Year to all from the
Publications Committee.

COMMENT

★

THE NEW YEAR—1962

This is the month of January and another year dawns; a year in which we will look forward to an increased interest in Amateur Radio, 1962 and the sunspot cycle promises unattractive conditions generally on the higher frequency bands, but improving conditions on the lower frequency bands. 1962, with a growing interest in s.s.b. transmissions from all over the globe, pointing up the future trend for Amateurs in order to accommodate the growing population of the Amateur Service. 1962, the year of the British Empire Games to be held in Perth, Western Australia, and the year the Wireless Institute of Australia will hold its first Federal Convention for three years.

Yes, there is something about a New Year which makes all of us look forward to the ensuing months of the year to come with a hope of achieving something. In the field of Amateur Radio there are many things to achieve—new antennae, new rigs, that first try at a simple s.s.b. outfit, the mobile equipment, the emergency equipment, new audio gear to perhaps serve as the family high fidelity set-up as well as a modulator; one or some of these things, and many other cherished hopes, come to mind at the commencement of another year.

At Headquarters there are many things to be done, too, the most urgent being the organisation for the forthcoming Federal Convention in Perth next Easter. It is proposed to design and produce a new handsome Membership Certificate that everyone should feel proud to display on the wall of his shack. A new certificate to replace the old National Field Day Certificate is on the drawing board. The new Remembrance Day Contest Certificate will be available.

The new "Handbook for the Guidance of Operators of Wireless Stations in the Amateur Service" will be printed by the Postmaster-General's Department and available to members complete with a number of amendments and deletions designed to simplify the interpretation of regulations. This book is not the law, but it is means by which we can regulate the sensible operation of our own stations in our limited frequency space. Take time off to brush up on the contents of this Handbook once every year.

And finally, on the DX bands remember you are virtually an ambassador for Australia. Your operating procedure, technique and manners are as important as the appearance and operation of your equipment—both should be good. Every signal that goes out of Australia should carry that "Goodwill Unto Man" which so characterises Amateur Radio all over the world.

Hearty Seasonal Greetings for the New Year to Amateurs wherever they may be situated from the gang at Headquarters.

FEDERAL EXECUTIVE, W.I.A.

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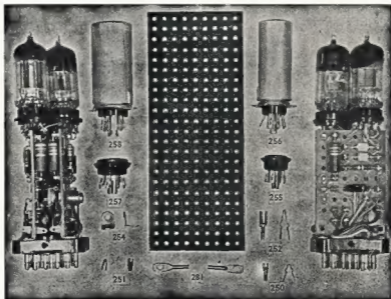
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MOBILE WHIP—WITH FERRAMIC CORE

CLEM J. MALOOF,* VK2AMA

NOW that spring is here and a young man's fancy turns to 40 metre mobile, here is a short discussion on, and a design for, a more highly efficient, strong and durable "dipstick" easily assembled from available items and which will even radiate the OM's pride and joy in having his own mobile gear at last.

It has a novel design in that the loading coil has a ferramic core which markedly reduces losses, increases Q and selectivity, and hence efficiency of radiation.

Without entering into a lot of antenna theory, which is readily available elsewhere, certain principles manifest themselves and it is there we shall discuss in non technical terms.

Fundamentally a shortened resonant whip may be considered as in Fig. 1. The inductance and capacitance of course cancel each other as in any resonant circuit.

Now for a given circulating r.f. current, the most power will be dissipated in the resistance of highest value, all resistances being in series except R-base. This will shunt the whole radiating system but poses no problem since even the poorest of insulators will have an impedance of many times the R-total of 30 ohms approx.

From this our prime objective is to make R-rad. as large as possible with respect to the R-total of the system, for the power developed here is the effective radiated power. The power developed in all the other positions is simply converted to heat and wasted.

Radiation resistance can be increased in two practical ways:

- (1) To make the overall size of the antenna as long as possible;
- (2) To raise the loading coil as high above the feed point as efficiency allows. (The coil cannot be raised right to the top because its losses mount alarmingly as it is necessary to add more turns to maintain resonance.)

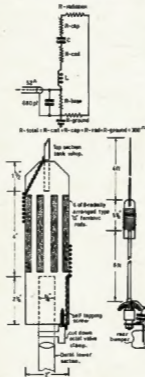
We can also tackle the problem by reducing as much as practicable all other resistances. Let us consider them individually, starting from the feed point.

R-coil depends on the number of turns and the resistivity of the conductor. The ratio of reactance to resistance must be high, i.e. high Q. As an example, an air-wound coil of high Q in the vicinity of 300 has a resistance of the order of 6 ohms at the centre of the whip. Using 2" diam. coil dimensions, this would amount to about 45 turns at the centre and considerably more at the higher position of our loading coil, together with a corresponding increase in resistance. Here is where the ferramic takes over and reduces turns to 19, having resistance of the order of 24 to 3 ohms, neglecting the small losses within the core itself. (N.B. Be careful to use the correct Q1 type ferramic.)

This saving in coil losses allows the higher position of the loading coil, thus increasing the radiation resistance over the usual centre loaded whip and raising the circulating r.f. current point higher above ground. (It has been shown that high r.f. current points radiate more than lower current points.)

R-capacitor is very small since the antenna is air-spaced from the chassis and therefore may be neglected.

R-ground includes the electrical resistance of large parts of the car body to each other and in particular to the connection of the feedline braid to chassis. The magnitude of this resistance is vague but one authority quotes



as much as 12 ohms at 4 megs. Having in mind the total input resistance of our antenna is of the order of 30 ohms, this is very significant. This loss must be reduced by:

- (1) Earthing feedline braid as close to whip base as possible, taking care to use large areas of contact and ensuring that paint, rust and foreign bodies are completely removed, giving good metal to metal contact. Here also avoid metals which may corrode in contact with each other, e.g. brass and aluminium.
- (2) Bonding doubtful sections of the car body to feed-line braid and to each other.

Finally, to complete the discussion, there is a very simple method for matching the 52 ohm co-ax line to the 30 ohm input impedance of the loaded whip almost perfectly. This is to shunt the termination of the line with a 680 pF mica capacitor. The advantage here is not to simply reduce s.w.r. losses which are so minor that they don't matter, but to simplify coupling line to final p.a. and to avoid retuning every time the v.f.o. is shifted.

Indeed, for the mobile on 40 metres only, there is much to be said in using the simple "old fashioned" link coupling which requires no band switching or any other controls, compared to our modern multi-controlled pi-coupler fials.

In summary, the efficiency of mobile whips for 40 metres is very very low, no matter which way we look at it. Therefore even the slightest improvement will give enormously more r.f. radiation than say the peaking up of a half wave doublet which is extremely efficient to start with.

CONSTRUCTION OF WHIP

The whip to be described is conveniently made in two sections for easy storage and quick assembly, taking less than five seconds. It is mechanically rigid, yet elastic enough to accommodate road shocks and its streamlined appearance will blend into any vehicle's contour. One section consists of tank whip and loading coil as an integral unit, the other section being simply the 6 ft. of 1/2" dural forming the main radiator.

For the construction you will need:

- 6 ft. of 1/2" heavy gauge dural tubing,
- 4 ft. top section of tank whip,
- 8" of 2" diam. polystyrene rod,
- 4 x 8" type Q1 ferramic rods,
- 1 pt. Ethylene Dichloride.
- 1 octal valve clamp (surplus). This has a lever action and an adjustable tension screw. As originally used it is bolted to chassis at one point and by flicking the lever, the octal valve is locked in or released.

Aerial base (any surplus). This has a long ground spike and the insulation is of ebonite solidly encased in brass. It seats perfectly the 1/2" dural tubing and mine cost only 1/2 db.

10 ft. of 12 gauge tinned copper wire.

The task requiring most ingenuity is to machine the poly. rod as indicated. This was done using a lathe for turning the end sockets and a vertical drill and jig to mill out the slots for the rods. These ferramic rods are filed in the centre and gently snapped in half. Each half is then radially countersunk into the poly. rod and secured with poly. cement applied in layers. This job takes about two days since each layer must dry before the next is applied. The poly. cement is made by dissolving

(Continued on Page 9)

GETTING TO KNOW THE OSCILLOSCOPE

PART TWO

J. L. K. MATCHETT,* B.A., B.Sc., B.Ed., VK3TL

Obviously the demonstration model described will need a high voltage power supply. A glance at c.r. tube characteristics will show that the A2 voltages are not uncommonly 2,000. However, it is possible to illustrate electron beam deflection with voltages as low as 350 using many common c.r. tubes. Such a power supply may be easily constructed by the teacher, or for the sum of about ten shillings, an old radio receiver may be bought and this will provide the power needed. In order to help you trace the wiring of the power supply of a radio receiver, or construct one of your own, a circuit is given (Fig. 5). T is the power transformer. The primary is connected to 230 or 240 v.a.c. of the mains supply. Employ an earth lead and solder it by means of a lug to the chassis. The bottom of a power transformer may look like as shown in Fig. 6.

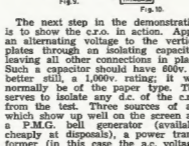
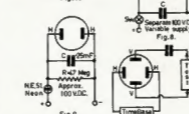
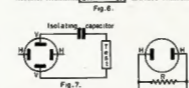
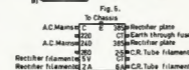
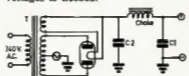
Usually the wires of the transformer are brought out to solder lugs, but occasionally they are not marked. To identify each one, it is necessary to use an ohmmeter or multimeter; the thickest wires will be the filament leads. Always test for resistance before connecting any leads to the a.c. mains in order to get some idea of turns ratio and therefore voltage output of the windings. An ordinary torch globe will act as a fuse and save both transformer windings and rectifier plates just in case there is a short across the output. The valve is any common rectifier, e.g. 80, 5Y3, 5V4, 5R4, 5Z3, 5U4 (all of these require five volts across their filaments), but some modern ones, e.g. 6X4, 6X5, 6V4 require 6.3 volts. In all cases make certain that the valve filament winding is quite a separate one from that of the c.r. tube filament.

Ch = filter choke. Due to its high inductance it provides impedance to a.c. at 50 c.p.s., so brings about some smoothing of ripple. In modern radio sets, this is a separate component (usually 8 henries at a 50 mA. rating), but in old radio sets you will see, if you trace the wiring, that the choke is a part of the dynamic speaker. In fact it provides the field for the speaker. (Modern speakers are of the permanent type and thus need no field coil.)

C1, C2 = electrolytic capacitors, usually about 8 μ F. or 16 μ F. With old sets you may find they take the form of aluminium cans. Pull any old capacitors (or condensers as they used to be called) out and replace with good modern ones of 600v. rating. Obviously, since they depend for their action upon electrolysis, their correct polarity must be observed. The red end is connected to the choke, i.e. positive side, and the metal end firmly soldered by means of tinned copper wire to ground, i.e. chassis.

So that the capacitors may discharge after the power pack is shut off, they may be made to discharge through a large value resistor (about 30,000 to 50,000 ohms), placed across the h.t. output. Its wattage rating will, of

course, depend upon the p.d. across it, but a usual value is 5 watts. Such a bleeder resistor has a safety function, but it also provides a little voltage regulation. The power pack will, with condenser input filtering as shown in Fig. 5, give about 400 to 450 volts d.c. output. Owing to the very small current drawn from it by the c.r.o., the actual voltage under load will not be much lower than this. In most cases this will be adequate for the requirements of the teacher but there are many other ways of obtaining higher voltages if needed.*



The next step in the demonstration is to show the c.r.o. in action. Apply an alternating voltage to the vertical plates through an isolating capacitor, leaving all other connections in place. Such a capacitor should have 600v. or better still, a 1,000v. rating; it will normally be of the paper type. This serves to isolate any d.c. of the c.r.o. from the test. Three sources of a.c. which show up well on the screen are a P.M.G. bell generator (available cheaply at disposals), a power transformer (in this case the a.c. voltages

applied may be compared by measuring the vertical displacement of the electron beam), and the output of an audio oscillator. One of the great advantages of using a low voltage power supply is that one requires a much lower test voltage to cause deflection of beam across the screen.

The teacher may now go on to provide his c.r.o. with a horizontal sweep. That is, he will cause the electron beam to sweep across the screen. This introduces one of the most practical applications of the capacitor. Set up the circuit as shown in Fig. 8.

A note on the d.c. adjustable power supply is given in the Appendix. With no test voltage across the vertical plates, close the switch. The capacitor charges up and the beam is sent across the screen in one direction which depends upon the connection to the d.c. supply. When the switch is released, it will discharge through the large resistor and so the beam is brought back to its starting point but at a slower rate.

Now add one or more capacitors of total capacitance about 8 μ F. (oil filled capacitors of good voltage rating are available from disposals). Repeat the experiment. Note how the time constant of the C-R system has increased and the beam will return very slowly across the screen. By rapid making and breaking of the switch, the beam will be observed to form a straight line across the screen. You have made a simple horizontal sweep which will lead to much discussion on behalf of the pupils.

Taking the c.r.o. a little further, we can make a continuous horizontal sweep or time base. All we need to do is to replace the switch in Fig. 8 with a neon lamp (see Fig. 9). The NES1 is fairly readily available, but try to obtain its special socket when you buy the lamp. (Price of both is about 4/-.)

All neons have the property of "striking", i.e. conducting when a certain voltage across them is reached. They continue to conduct even when the p.d. across them has fallen below their striking voltage until the extinguishing voltage is reached. In this circuit the lamp strikes as the capacitor builds up, but falls when the latter discharges through the resistor. By carefully adjusting the d.c. voltage, the lamp may be set flashing. (If the voltage is too high the lamp will remain alight all the time.) The frequency of the lamp flashes is dependent upon the lamp characteristics as well as the values of the capacitor and resistor, but each time it is seen to flash, the beam will be swept forward and then backwards across the c.r. tube screen. Remember that the adjustable power supply mentioned is one in addition to the power supply delivering h.t. to the deflecting plates through the cables.

Thus provided with a time base, we may return to examine our test voltage. Apply the latter as usual to the vertical

plates and the time base to the horizontal plates (see Fig. 10).

Provided that the frequency of the "test" is not too great compared with that of our T-B, a series of wave forms may be observed. The wave forms will not be pure for a reason to be explained later. This wave formation may be compared with a person drawing a line vertically on a wall (test voltage) whilst walking along horizontally (time base). Obviously a wave pattern will be seen on the wall.

The above description will probably suffice to show pupils some of the practical aspects of the physics that they learn, and will not be beyond the demonstration powers of most teachers at this level of instruction. The following notes are brief and are accompanied by semi-diagrammatic sketches which will serve to complete the description of the c.r.o.

In many c.r.o.'s a "soft" or gas-filled valve has a function of a relaxation oscillator. A simple one for the home constructor is the EN31 or the 884 triode. Its function is similar to that of the neon tube, the gas in it ionizing and so conducting when a certain voltage across it is reached.

Note how the value of the capacitor in the circuit (Fig. 11) may be altered by switching. This forms the "coarse frequency" adjustment in the front panel of the c.r.o., the frequency of the T/B being changed for the various frequencies of the test under investigation. Note too, that the resistor across the switched-in capacitor is made variable and so provides the c.r.o. with its "fine frequency" adjustment.

Unfortunately in the circuit of Fig. 11 there is no guarantee that each sweep of the T/B will occur at exactly the same part of the cycle of input current under investigation, and so it will not be surprising to see a series of wave patterns overlapping each other on the screen. To prevent this, we must feed back a little of the test current to the grid of our T/B oscillator. The frequency of the T/B being approximately a sub-multiple of the test, it will be "locked" to it.

The control in Fig. 12 will be the "synchronisation adjustment" ("synch" as it is called) in front of the c.r.o. The block diagram of the c.r.o. will now look as shown in Fig. 13.

Amplifiers (which must be very carefully designed so that there will be no loss of gain at higher frequencies) are used both for the vertical and horizontal plates, so that very small input voltages may be examined. The general scheme of such an amplifier is shown in Fig. 14. It is not a difficult task to adapt an ordinary r.f. amplifier for use as a radio for this purpose. The theory is only one step from the theory of a triode once the function of the two new electrodes and the meaning of dropping resistor are pointed out.

Better quality c.r.o.'s as well as having good amplifiers, possess the property of suppressed fly-back. By applying a voltage of certain phase from the plate of the sweep generator to the intensity grid of the c.r. tube, the return trace of the electron beam to its starting point may be blanked out and only the wave form trace observed. After all these improvements, the schematic diagram of the c.r.o. may appear as shown in Fig. 15.

The front panel of the c.r.o. and its connections may look something like that shown in Fig. 16. All the controls shown with an arrow are adjustable; the shaded ones are insulated terminals.

Intensity.—If you use low voltages you will find that this intensity or brilliance control will need to be turned full up.

Focus.—If the beam is fully out of focus, you may be able to see on some c.r. tubes the shadow of one or more of the deflecting plates upon the screen. Thus the plates may take the place of the conventional Maltese Cross of the Crookes tube. If you wish to demonstrate the movement of a "spot" on the screen do not allow it to remain on the screen for a long period in any one position or else it may "burn" the screen. De-focus the beam and then re-focus when ready.

X Shift.—Used to alter the position of the spot or wave pattern in a horizontal direction. Illustrates electrostatic deflection.

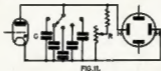


FIG. 11.

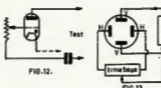


FIG. 12.

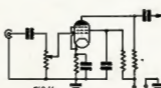


FIG. 13.

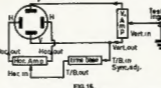


FIG. 14.

One of the vertical and horizontal amplifier output terminals is usually earthed except in the case where push-pull amplification is used.

Y Shift.—Used to alter the position of the spot or wave pattern in a vertical direction.

Coarse Freq. and Fine Freq.—Used to bring about a suitable wave pattern upon the screen. Adjustment will depend upon the frequency of the test.

Synch. Adj.—The synchronisation adjustment. This control brings about a stationary pattern on the screen. **E** — earth. In the simplest of c.r.o.'s, this will also be one of the leads to the vertical amplifier, and so one of the leads from the "test" will be connected to it.

V. In.—Vertical amplifier input. This is the remaining terminal to which the "test" is connected.

Vert. Amp.—This is the gain control of the vertical amplifier. Just connecting the test to the E and the V. In. terminals will result in a vertical line being shown on the screen whose height may be controlled by the vertical amplifier gain control. If the test is a d.c. source then the line will only show up momentarily owing to the presence of the blocking capacitor, unless there is provision made to connect the test directly to the c.r.i. plates.

V. Out.—Vertical amplifier output. In the simplest c.r.o. the other output terminal will be earth.

T/B In.—Time base input. Normally a time-base will be used and so the output of the vertical amplifier must be connected by means of a "jumper" (usually a piece of copper wire) to the T/B input terminal. This is shown in Fig. 16.

T/B Out.—The time base output. Where the T/B is used, its output is amplified and so the latter is connected to the H. In.

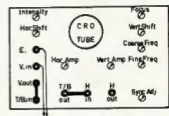


FIG. 16.

H. In.—Horizontal amplifier input terminal. The jumper used is also shown in Fig. 16.

H. Out.—Horizontal amplifier output. Behind the front panel this terminal is connected to one of the horizontal plates of the c.r.o.

Hor. Amp.—The horizontal amplifier gain control. With no test connected to the c.r.o., the length of the horizontal sweep across the c.r. screen will be made greater with this gain control.

With such an arrangement of terminals on the front panel, the amplifiers may be used independently of the c.r. tube and also other time bases or the ordinary 50 c.p.s. household current may be used as an "external" horizontal sweep. Another advantage is that the T/B may be disconnected from the amplifiers and sources of alternating current connected to the two sets of amplifiers to give Lissajous Figures. A separate article would be necessary to give some of the other uses that could be made of this wonderful instrument—the cathode ray oscilloscope.

We have followed through the development of the c.r.o. from elementary principles and some of these principles have been demonstrated. The thing to remember is that any complicated electronic device may be split up into sections which conveniently lend themselves to study. My advice to prospective constructors is to start off with the simplest of circuits and add to them. Most teachers of science at the maintenance standard are capable of building their own equipment; the only difficulties seem to be the matter of time and

(Continued on Page 9)



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HINTS AND KINKS

MODIFICATION TO No. 122 SET

It is a very simple task to modify the ever-popular No. 122 Set to allow independent tuning of the receiver while maintaining the same carrier frequency.

This is done by disconnecting the v.f.o. section of the tuning gang and replacing it with the netting trimmer which now becomes v.f.o. control.

To have optimum bandwidth, the capacity of the netting trimmer C26A must be increased from maximum of 11 pF. to 50 pF., which allows complete coverage of 40 and 80 metres. The altered v.f.o. circuitry is now resonated on to the Amateur bands by adjusting fixed capacity across C26A. This can be conveniently made up of trimmers C29A and C29B connected in parallel.

Should the transceiver be required to transmit outside Amateur frequencies, as in an emergency, it is a simple task to add a single throw double pole toggle switch in the crash level position which disconnects the shunt capacity across C26A and re-connects the original v.f.o. tuning gang, thus re-establishing locked rx and v.f.o. tuning.

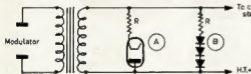
Incidentally, mechanical stability of the v.f.o. is greatly improved by this manoeuvre, which should interest those intending to mobile. Further mechanical bandwidth may be obtained by mounting a small planetary drive on C26A.

—Clem Maloff, VK2AMA.

SPLATTER!

This form of interference is probably the most common one and probably the most exasperating, for we manufacture it in our own various ways and are often most offended and incredulous when some sufferer, who can no longer tolerate it, brings it to notice!

There is no need to delve into the theory regarding splatter here, for it has already been amply covered in various articles in other publications, and specific reference is made to "CQ," Jan. '59, p. 46, in this regard. The title is "Negative Cycle Loading" and describes symptoms and treatment, the latter being comparatively simple.



For those unable to obtain that article for perusal, a brief summary of the circuit is shown herewith.

Two types of rectifiers are shown, A being a vacuum type and B silicon diodes in series. Either one can be used.

The resistor R shall have a value of half the impedance of the Class C stage and power rating of one-fourth the input.

The diode can be any rectifier which has sufficient current and inverse voltage rating.

A simple approach is to put some silicon rectifiers in series with the resistor, across the modulation transformer secondary, saving weight, space and heat.

From personal experience "N.C.L." can be very strongly recommended for use in all a.m. transmitters, so why not do the modification now and avoid needless interference to others using the band?

—Jim Herd, VK3JK.

A CLOCK FOR THE SHACK

A handy electric clock can be made by modifying the face of the small clock from a clock radio. I used a piece of grey laminex 8" x 8" on which was placed a paper template of a clock face 7" in diameter. The minute impressions in the laminex were made by several turns of a small drill, and the hour positions by a large one. The template was then removed, the minute impressions filled with black, and the hour with red enamel.

The hands were removed from the clock and the movement mounted on the rear of the laminex, the centre spindle for the hands passing through a hole (to size) in the centre.

The small hands were extended by soldering a piece of 16 gauge copper wire on each to the required size to suit the face. On the sweep hand, a piece of 1/32" was used.

Numbers of a suitable size were cut from a calendar and fixed in position. An outside cover made, and another piece of useful equipment for the shack.

The controls for use with a radio, which protrude, have to be removed to allow for the longer hand movement, also the alarm at the rear which can easily be cut away.

—C. Abernethy, W1A-L2211

CQ CQ CQ

ATTENTION BLIND AMATEURS

At the recent Victorian State Convention of the W.I.A. the matter of aid to blind amateurs was brought up by Cyril Minns, VK3AM. It was proposed by Ken VK3TL that an ad hoc committee be formed to investigate the ways in which other amateurs may help their blind friends.

After talking over this matter with Cyril, himself a blind Amateur, and having obtained some experience in following for him, it was felt that the following points should be brought out before any nation-wide or state-wide tape exchange and recording network be set up.

Firstly, the number of blind amateurs and their location in Australia must be established. Would those amateurs please send in the following details: Name of Blind Amateur, Call Sign, Postal Address, Make and Model of Tape Recorder available (if any), Speed (or speeds) of machine, details of tracks.

Please forward this information as soon as possible to Ken Matchett, 69 Atkinson Street, Templestowe, Victoria. Would the readers of this article do all they can to bring this to the notice of those concerned? We know you'll help if you are able.



1962 A.R.R.L. INTERNATIONAL DX COMPETITION

All Amateur Radio operators throughout the world are invited to participate in the 28th A.R.R.L. International DX Competition. You may earn a certificate of performance award issued to the top Phone and C.W. scorer in each country. In addition, you might QSO new states for the W.A.V.E. award, or Canadian Provinces for the W.A.V.E. award.

This 1962 DX Contest will be held over two week-ends for c.w. and two week-ends for phone, as follows:

PHONE—February 2-4 and March 2-4.

CW—February 16-18 and March 16-18.

The starting time in each instance is 2400 GMT Friday and ends 2400 GMT Sunday. Phone and c.w. are separate contests.

Object: The rules are unchanged from last year. In QSO as many W-K-VZ-VO-KJ5-KL7 stations as possible during the contest in as many different call areas possible per band. Exchange: DX stations send RS or RST report followed by a three-digit number representing power input. For example, on c.w. you might send 579550, which means RST 579 and power input 50 watts. U.S.A.-Canada stations will send you a number consisting of RS or RST report followed by the name of their State or Province.

Scoring: Repeat QSOs on additional bands are permitted. Your multiplier is the total call areas (not states) QSOed on each band (maximum of 11 per band). Each completed QSO counts three (3) points. Incomplete contacts count two (2) points. Final score is the number of QSO-points times the multiplier.

Free log forms are available on request from A.R.R.L. You don't have to use these forms. Logs should contain calls, dates, times, bands, exchanges, and points. Send your log with summary data to A.R.R.L. DX Contest, 33 Langlee Rd., West Hartford 7, Conn., U.S.A. Your entry must be postmarked by April 28, 1962, to be eligible.

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MOBILE WHIP-WITH FERRAMIC CORE

(Continued from Page 3)

poly shavings in the solvent and adjusting to a suitably thick consistency.

When the rods are sealed up and the ferramic rods are snugly tucked away, the valve clamp is cut down to fit the 1" dural and finally secured to the bottom of the poly. rod with a 3" self tapping screw, providing a low resistance and efficient clamp to hold it rigidly in place.

The aerial base is mounted on an angle bracket simply by cutting off all of its stem excepting 2" which then has a thread turned on to it and which may be bolted in place firmly.

The lowest 1½" of the tank whip is now roughened with a file, moistened with poly. cement and thrust firmly into the top of the poly. rod where it is allowed to set hard for two hours.

All is now set for winding the inductance. At each of its ends a tunnel is drilled through the poly, to the positions of attachment by soldering. Drilling poly must be taken slowly since heating may cause melting. If this occurs the bit must be withdrawn and scraped with a keen knife. The top of the coil is soldered to bottom of tank whip, while bottom of coil goes to the clamp.

ADJUSTING THE WHIP

The complete whip is now assembled on the vehicle and is tuned by adjusting the bottom turn of the coil. This

is best performed using a g.d.o. and an accurately calibrated receiver tuned to 7.1 meg.—being the centre of the phone band. The g.d.o. is coupled into a one-turn link between antenna base and the 680 pF. capacitor whose other end is earthed. This loop has negligible detuning effect; in fact it took an extra 4 ft. of bottom section to shift resonance 50 kc.

A more sensitive method of adjustment may follow the above. This is to fire up on 7.1 mega. (N.B. regulations) and, using an s.w.r. indicator in the transmitter end of the co-ax, adjust the bottom turn on the loading coil very slightly until s.w.r. approximates closely 1:1, which it will do with no trouble. The power handling capability was found to exceed 40w. r.f. input to the antenna base.

The performance of the whip has been excellent, having been in use eight months with a 122 set delivering 4 watts of r.f. output.

Its mechanical and electrical stability is f.b. and despite a 2,000 mile mobile holiday into VK4 through all weathers, the resonance point did not shift more than 10 kc. Two mobile scramblers found us co-winner in one and runner-up in the other, so at least nothing has been lost in this design as compared to more orthodox ones.

A word of warning, however, is to jealously guard the loading coil from the influence of stray magnetic fields. These are likely to alter its characteristics, necessitating a retuning job—ugh! After all that poly. has set hard too! ●

NAT. FIELD DAY 1962

ADDITIONAL RULE 8A

Entrants to Section C for Multiple Operator Stations can set up separate transmitters to work on different bands at the same time. All such units of a Multiple Operator Station must be located within an area that can be encompassed by a circle not greater than half a mile diameter.

For each transmitter of a Multiple Operator Station a separate log shall be kept with serial numbers starting from 001 and increasing by one for each successive contact. All logs of a Multiple Operator Station shall be submitted by the Operator under whose Call Sign the transmitters are working. No two transmitters of a Multiple Operator Station are permitted to operate on the same band at any time.



KNOW THE OSCILLOSCOPE

(Continued from Page 3)

one of getting started. Have a try and you will find it less difficult than you at first thought. You will learn a lot as well as getting a lot of fun out of your work.

APPENDIX

"An Adjustable Power Supply"

The following is a short account of an easy-to-make unit used to demonstrate the horizontal sweep of the c.r.o. It will find many uses in the laboratory where the load drawn is low. All its parts are from disused radio sets and cost next to nothing. The circuit is shown in Fig. 17.

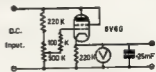


FIG. 17

The adjustor is seen to be a cathode follower. A tetrode of the p.a. type, e.g. 6L6, 6F6, 6V6, EL33, EL34, ELA1 with high current-carrying capacity and high mutual conductance is used. The 6V6 is a common output valve in radio receivers, and the 500K pot. is commonly a receiver volume control. The less negative the grid becomes, the greater the plate current and so the greater the current through the cathode resistor. The output voltage is developed across this. Disposals voltmeters of about 0-40 v.d.c. are cheap and may be made into 0 to 400v. f.s.d. meters by altering their scale markings and adding a multiplier. Voltages from about 40 to 400 volts are available, the current being restricted by the components used (usually not much more than about 100 mA.). ●

* The original article and construction details, if needed, will be found in "Radio and Electrical Review," May 1966.

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Crystals and Accessories, made by International Crystal Mfg. Co. of U.S.A., for Amateur and Commercial use are now available in Australia in the following types and frequencies.

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TYPE FM-9: A new miniaturised series. Height 0.510", width 0.400", tolerance 0.01%.

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Fundamental	1000 Kc. to 20 Mc.	8000 Kc. to 19.99 Mc.
3rd Overtone	10 Mc. to 59.99 Mc.	20 Mc. to 59.99 Mc.
5th Overtone	60 Mc. to 99.99 Mc.	60 Mc. to 110 Mc.
7th Overtone	100 Mc. to 137 Mc.	Not Available

PRICES: Vary according to Frequency and Type:—

Type FA-5 and FA-9 range from £3/10/0 to £9/12/0.

Type FM-9 range from £5/5/0 to £10/15/0.

TYPE FX-1: These Crystals are also available in 0.01% or 0.005% tolerances for frequencies from 200 Kc. to 60 Mc. Height 0.75", width 0.75".

PRICES: Depending on tolerance and frequency, range from £3/10/0 to £16/0/0.

ACCESSORIES include crystal ovens on standard octal base. Crystal sockets in multiple mountings with or without switches. Crystal controlled converters (single band) for use ahead of standard car radios for Amateur mobile work. There are units to cover all Amateur bands. Printed circuit Oscillators in kit or wired form, also Multivibrators.

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AUSTRALIAN DX CENTURY CLUB AWARD

OBJECTS

1. This Award was created in order to stimulate interest in working DX in Australia and to give successful applicants some tangible recognition of their achievements.
2. This Award, to be known as the "DX Century Club" Award, will be issued to any Australian Amateur who satisfies the following conditions.
3. A certificate of the Award will be issued to the applicants who show proof of having contacted one hundred countries, and will be endorsed as necessary, for contacts made using only one type of emission.

REQUIREMENTS

1. Verifications are required from one hundred different countries as shown in the Official Countries List.
2. The Official Countries List will be published annually in "Amateur Radio" and will be amended from time to time as required. Should a country be deleted from the Countries List at any time, members and intending members will be credited with such country if the date of contact was before such deletion.
3. The commencing date for the Award is 1st January 1946. All contacts made on or after this date may be included.

OPERATION

1. Contacts must be made in the H.F. Band (Band 7) which extends from 3 to 30 Mc., but such contacts must only be made in the authorised Amateur Bands in Band 7.

2. All contacts must be two-way contacts on the same band. Cross band contacts will not be allowed.
3. Contacts may be made using any authorised type of emission for the band concerned.
4. Credit may only be claimed for contacts with stations using regularly assigned Government call signs for the country concerned.
5. Contacts made with ship or aircraft stations will not be allowed, but land-mobile stations may be claimed provided their specific location at the time of contact is clearly shown on the verification.
6. All stations must be contacted from the same call area by the applicant, although if the call sign is subsequently changed, contacts will be allowed under the new call sign providing the applicant is still in the same call area.
7. All contacts must be made when operating in accordance with the Regulations laid down in the "Handbook for the Guidance of Operators of Amateur Wireless Stations" or its successor.

VERIFICATIONS

1. It will be necessary for the applicant to produce verifications in the form of QSL cards or other written evidence showing that two-way contacts have taken place.
2. Each verification submitted must be exactly as received from the station contacted, and altered or forged verifications will be grounds for disqualification of the applicant.

3. Each verification submitted must show the date and time of contact, type of emission and frequency band used, the report and the location or address of the station at the time of contact.
4. A check list must accompany every application setting out the details for each claimed station in accordance with the details required in Rule 4.3.

APPLICATIONS

1. Applications for membership shall be addressed to the Awards Officer, Box 2811W, G.P.O., Melbourne, Vic., accompanied by the verifications and the check list with sufficient postage enclosed for their return to the applicant, registration being included if desired.
2. A nominal charge of 2/6, which shall also be forwarded with the application, will be made for the issue of the certificate to successful applicants who are non-members of the Wireless Institute of Australia.
3. Successful applicants will be listed periodically in "Amateur Radio". Members of the D.X.C.C. wishing to have their verified country totals, over and above the one hundred necessary for membership, listed will notify these totals to the Awards Officer.
4. In all cases of dispute, the decision of the Awards Officer and two members of the Federal Executive of the W.I.A. in the interpretation and application of these Rules shall be final and binding.
5. Notwithstanding anything to the contrary in these Rules, the Federal Council of the W.I.A. reserves the right to amend them when necessary.

AUSTRALIAN V.H.F. CENTURY CLUB AWARD

OBJECTS

1. This Award has been created in order to stimulate interest in working DX in Australia, and to give successful applicants some tangible recognition of their achievements.
2. This Award, to be known as the "V.H.F. Century Club" Award, will be issued to any Australian Amateur who satisfies the following conditions.
3. Certificates of the Award will be issued to the applicants who show proof of having made one hundred contacts on the V.H.F. bands, and will be endorsed as necessary, for contacts made using only one type of emission.

REQUIREMENTS

1. Contacts must be made in the V.H.F. Band (Band 8) which extends from 30 to 300 Mc., but such contacts must only be made in the authorised Amateur Bands in Band 8.
2. In the case of the authorised bands between 30 and 100 Mc., verifications are required from one hundred different stations at least seventy of which must be Australian. The Amateur Bands 50 to 54 Mc. and 55 to 60 Mc. will be counted as one band for the purposes of the Award.
3. In the case of the authorised Amateur Band between 100 to 200 Mc. and any authorised band between 200 to 300 Mc., verifications from one hundred different stations for each band is required.
4. It is possible under these rules for one applicant to receive three certificates, one for each of the authorised Amateur Bands nominated in Rules 2.3 and 2.4.
5. The commencing date for the Award is 1st June, 1943. All contacts made on or after this date may be included.

OPERATION

1. All contacts must be two-way contacts on the same band, and cross band contacts will not be allowed.
2. Contacts may be made using any authorised type of emission for the band concerned.
3. Fixed stations may contact portable/mobile stations and vice versa, but portable/mobile station applicants must make their contacts from within the same call area.
4. Applicants, when operating either portable/mobile or fixed, may contact the same station licensee, but may not include both contacts for the same type of endorsement.
5. Applicants may only count one contact for a station worked as a limited licensee with a Z call sign who is subsequently contacted as a full A.O.C.F. holder.
6. All stations must be contacted from the same call area by the applicant, although if the applicant's call sign is subsequently changed, contacts will be allowed under the new call sign providing the applicant is still in the same call area.
7. All contacts must be made when operating in accordance with the Regulations laid down in the "Handbook for the Guidance of Operators of Amateur Wireless Stations" or its successor.

VERIFICATIONS

1. It will be necessary for the applicant to produce verifications in the form of QSL cards or other written evidence showing that two-way contacts have taken place.
2. Each verification submitted must be exactly as received from the station contacted, and altered or forged verifications will be grounds for disqualification of the applicant.
3. Each verification submitted must show the date and time of contact, type of emission and frequency band used, the report and the location or address of the station at the time of contact.

4. A check list must accompany every application setting out the following details:—
 - 4.1. Applicant's name and call sign, and whether a member of the W.I.A. or not.
 - 4.2. Band for which application is made, and whether special endorsement is involved.
 - 4.3. Where applicable, the date of change of call sign and previous call sign.
 - 4.4. Details of each contact as required by Rule 4.3.
 - 4.5. The applicant's location at the time of each contact if portable/mobile operation is involved.
 - 4.6. Any relevant details of any contact about which some doubt might exist.

APPLICATIONS

1. Applications for membership shall be addressed to the Awards Officer, Box 2811W, G.P.O., Melbourne, Vic., accompanied by the verifications and the check list with sufficient postage enclosed for their return to the applicant, registration being included if desired.
2. A nominal charge of 2/6, which shall also be forwarded with the application, will be made for the issue of the certificate to successful applicants who are non-members of the Wireless Institute of Australia.
3. Successful applicants will be listed periodically in "Amateur Radio". Members of the V.H.F.C.C. wishing to have their verified totals, over and above the one hundred necessary for membership, listed will notify these totals to the Awards Officer.
4. In all cases of dispute, the decision of the Awards Officer and two members of the Federal Executive of the W.I.A. in the interpretation and application of these Rules shall be final and binding.
5. Notwithstanding anything to the contrary in these Rules, the Federal Council of the W.I.A. reserves the right to amend them when necessary.

AUSTRALIAN D.X.C.C. COUNTRIES LIST

	Phone	C.W.		Phone	C.W.
AC3		Sikkim	*FF8		French West Africa
AC4		Tibet	TU2	(fr. 7/8/60)	Ivory Coast R.
AC5		Bhutan	TX2	(fro m5/8/60)	Voltaic Rep.
AP		East Pakistan	TY2	(fr. 1/8/60)	Dahomey Rep.
AP2		Pakistan	TZ2	(from 20/6/60)	Mali Rep.
BV (C3)		Formosa	5U7	(from 3/8/60)	Niger Rep.
BY (C)		China	6T5	(from 20/6/60)	Mauritania
C8		Manchuria	6W8	(fr. 20/6/60)	Senegal Rep.
CE		Chile	FG7		Guadeloupe
CE9, KC4, LU-Z, VK0, VP8, ZL5		etc., Antarctica	PH8		Comoro Is.
CE0A		Easter I.	F18	(prior 20/7/55)	Fr. Indo China
CE0Z		J. Fernandez Arch.	FK8		New Caledonia
CM, CO		Cuba	FLJ		Fr. Somailand
CN2 (prior 1/7/60)		Tangier	FM7		Martinique
CN2, 8, 9		Morocco	FN	(prior 1/11/54)	French India
CP		Bolivia	FO8		Clipperton I.
CR4		Cape Verde Is.	FO8		Fr. Oceania
CR5		Portuguese Guinea	FTW		St. Pierre & Miqu. Is.
CR5		Principe, Sao Thome	*FQ8		Fr. Equatorial Africa
CR6		Angola	TL8	(fr. 13/8/60)	Cen. Afric. R.
CR7		Mozambique	TN8	(from 15/8/60)	Congo Rep.
CR8		Goa (Port. India)	TR8	(from 17/8/60)	Gabon Rep.
CR9		Macao	TT8	(from 11/8/60)	Chad Rep.
CR10		Port. Timor	FR7		Reunion I.
CT1		Portugal	FS7		Saint Martin
CT2		Azores	FUS, YJ1		New Hebrides
CT3		Madeira Is.	FW8		Wallis & Futuna Is.
CX		Uruguay	FY7		Fr. Guiana & Inini
DJ, DL, DM		Germany	G		England
DU		Philippine Is.	GC		Channel Is.
EA		Spain	GD		Isle of Man
EA6		Balearic Is.	GI		Northern Ireland
EA8		Canary Is.	DM		Scotland
EA9		Itni	GW		Wales
EA9		Rio de Oro	HA		Hungary
EA9		Spanish Morocco	HB		Switzerland
EA0		Spanish Guinea	HC		Ecuador
EI		Rep. of Ireland	HC8		Galapagos Is.
EL		Liberia	HE		Liechtenstein
EP, EQ		Iran	HH		Haiti
ET2		Eritrea	HI		Dominican Rep.
ET3		Ethiopia	HK		Colombia
F		France	HK0		Arch. of San Andres and Providencia
FA		Algeria	HK0		Bajo Nuevo
FB8		A'dam & St. Paul Is.	HK0		Malpelo Is.
FB8		Kerguelen Is.	HL		Korea
FB8		Tromelin I.	HP		Panama
FC		Corsica	HR		Honduras
FD		Togo	HS		Thailand
FE8		French Cameroons	HV		Vatican
			HZ		Saudi Arabia
			II, IT1		Italy

*Fr. West Africa and Fr. Equatorial Africa: Only contacts dated prior to when the particular area obtained separate listing (as shown) will count.

	Phone	C.W.		Phone	C.W.
II (prior 1/4/57)	Trieste		PK5	Neth. Borneo	
I5 (prior 1/7/60)	It. Somaliland		PK6	Celebes & Molucca Is.	
IS1	Sardinia		PK	Andorra	
JA, KA	Japan		PY	Brazil	
JT1	Mongolia		PY0	Fernando de Noronha	
JY	Jordan		PY0	Trindade & Martin Vaz Is.	
JZ0	Neth. New Guinea		PZ1	Netherlands Gulana	
K, W	U.S.A.		SL, SM	Sweden	
KA0, KG6I	Bonin & Volcano Is.		SP	Poland	
KB6	Baker, Howland and American Phoenix Is.		ST2	Sudan	
KC4	Navassa I.		SU	Egypt	
KC6	Eastern Caroline Is.		SV	Crete	
KC8	Western Caroline Is.		SV	Dodecanese	
KG4	Guantanamo Bay		TA	Turkey	
KG6	Marcus I.		TF	Iceland	
KG6	Mariana Is.		TG	Guatemala	
KH6	Hawaiian Is.		TI	Costa Rica	
KH6	Kure I.		TI0	Cocos I.	
KJ6	Johnston I.		TL, TN, TR, TZ (see after FQ8)		
KL7	Alaska		TU, TX, TY, TZ (see after FF8)		
KM6	Midway Is.		UA1, 2, 3, 4, 6	Eur. R.S.F.S.R.	
KP4	Puerto Rico		UA1	Franz Josef Land	
KP6	Palmyra Group, Jarvis I.		UA2	Kaliningrad Region	
KR6	Ryukyu Is.		UA9, 0	Asiatic R.S.F.S.R.	
KS4B	Serrana Bank and Roncador Cay		UA0 (prior 1/8/60)	Wrangel I.	
KS4	Swan Is.		UB6	Ukraine	
KS6	American Samoa		UC2	White Russian S.S.R.	
KV4	Virgin Is.		UD6	Azerbaijan	
KW6	Wake I.		UE6	Georgia	
KX6	Marshall Is.		UG6	Armenia	
KZ6	Canal Zone		UH8	Turkoman	
LA	Jan Mayen		UI8	Uzbek	
LA	Norway		UJ8	Tadzhik	
LA	Svalbard		UL7	Kazakh	
LU	Argentina		UM8	Kirghiz	
LX	Luxembourg		UN1 (prior 1/7/60)	Kar-Fin.Rep.	
LZ	Bulgaria		UC6	Moldavia	
M1	San Marino		UP2	Lithuania	
MP4	Bahrain		UQ2	Latvia	
MP4	Qatar		UR2	Estonia	
MP4	Trucial Oman		VE, VO	Canada	
OA	Peru		VK	Australia	
OD6	Lebanon		VK2	Lord Howe Is.	
OE	Austria		VK4	Willis Is.	
OH	Finland		VK9	Christmas I.	
OH0	Aland Is.		VK9	Cocos Is.	
OK	Czechoslovakia		VK9	Nauru I.	
ON4	Belgium		VK9	Norfolk I.	
OX, KG1	Greenland		VK9	Papua Terr.	
OY	Faeroes		VK9	Terr. of New Guinea	
OZ	Denmark		VK0	Heard I.	
PA0, FI1	Netherlands		VK0	Macquarie I.	
PJ	Neth. West Indies		VO (prior 1/4/49)	New1./Lab.	
PJ2M	Sint. Maarten		VP1	British Honduras	
PK1, 2, 3	Java		VP2 (prior 1/6/58)	Leeward Is.	
PK4	Sumatra		VP2	Anguilla	
			VP2	Antigua, Barbuda	

† One contact with each group formerly known as "Leeward Is." and "Windward Is." dated prior to 1/6/58 may be credited, in which case no further credit as a separate listing, as from 1/6/58, will be given those particular islands.

	Phone	C.W.		Phone	C.W.
VP2		Br. Virgin Is.	YU		Yugoslavia
VP2		Montserrat	YV		Venezuela
VP2		St. Kitts, Nevis	YV0		Aves I.
VP2 (prior 1/6/58)		Windward Is.	ZA		Albania
VP2		Dominica	ZB1		Malta
VP2		Grenada & Deps.	ZB2		Gibraltar
VP2		St. Lucia	ZC4		Cyprus
VP2		St. Vincent & Deps.	ZC5		Br. North Borneo
VP3		British Guiana	ZC8		Palestine
VP4		Trinidad & Tobago	ZD1		Sierra Leone
VP5		Cayman Is.	ZD3		Gambia
VP5		Jamaica	ZD6		Nyasaland
VP5		Turks & Caicos Is.	ZD7		St. Helena
VP6		Barbados	ZD8		Ascension Is.
VP7		Bahama Is.	ZD9		Tristan da Cunha and
VP8		Falkland Is.			Gough I.
VP8, LU-Z		South Georgia	ZE		Southern Rhodesia
VP8, LU-Z		South Orkney Is.	ZK1		Cook Is.
VP8, LU-Z		South Sandwich Is.	ZK1		Manihiki Is.
VP8, LU-Z, CE9		Sth. Shet. Is.	ZK2		Niue
VP9		Bermuda Is.	ZL		Chatham Is.
VQ1		Zanzibar	ZL		New Zealand
VQ2		Northern Rhodesia	ZL1		Kermadec Is.
VQ4		Kenya	ZL4		Auckland and Campbell Is.
VQ5		Uganda	ZM6		British Samoa
VQ6 (prior 1/7/60)		Br. Somaliland	ZM7		Tokelau
VQ8		Cargados Carajos Shs.	ZP		Paraguay
VQ8		Chagos Is.	ZS1, 2, 4, 5, 6		Union of S. Africa
VQ8		Mauritius	ZS2		Prince Ed. and Marion I.
VQ8		Rodriguez I.	ZS3		South-West Africa
VQ9		Seychelles	ZS7		Swaziland
VR1		British Phoenix Is.	ZS8		Basutoland
VR1		Gilbert & Ellice Is.	ZS9		Bechuanaland
		and Ocean I.	3A		Monaco
VR2		Fiji Is.	3V8		Tunisia
VR3		Fanning & Christmas Is.	3W8, XV5		Vietnam
VR4		Solomon Is.	4S7		Ceylon
VR5		Tonga Is.	4W1		Yemen
VR8		Pitcairn I.	4X4 (from 14/5/48)		Israel
VS1 (from 1/4/46)		Singapore	5A		Libya
VS4		Sarawak	5H3		Tanganyika
VS5		Brunei	5N2		Nigeria
VS6		Hong Kong	5R8		(Madagascar) Malagasy
VS9		Aden & Socotra	5U7 (see after FF8)		
VS9		Kamaron Is.	601, 602 (from 1/7/60)		
VS9		Maldives Is.			Somalia Rep.
VS9		Sultanate of Oman	6T5 (see after FF8)		
VU2		India	6W8 (see after FF8)		
VU4		Laccadive Is.	7G1 (from 1/10/58)		Rp. of Guinea
VU5		Andaman & Nicobar Is.	9G1, ZD4		Ghana
XE, XF		Mexico	UK1		Kuwait
XE4		Revilla Gilego	9K3		Kuwait-Saudi Arabia Neutral Zone
XW8		Laos			Malaya
XZ3		Burma	9M2		Nepal
YA		Afghanistan	9N1		(previously OQ5-0) Rep. of The Congo
YI		Irak	9S4 (prior 1/4/57)		Saar
YK		Syria	9U5 (from 1/7/60)		Ruanda-Urundi
YN, YN0		Nicaragua			Aldabra Is.
YO		Roumania			Cambodia
YS		Salvador			

Sub Editor: ROBERT YOUNG, WIA-L3076,
14 Alverna Grove, Brighton, Victoria
ADDRESS CORRESPONDENCE FOR THIS PAGE DIRECT TO THE SUB EDITOR

Hello fellow short wave listeners, this is your new scribe for these notes, so I will introduce myself to you. My name is Robert Young (no relation to the famous film star). WIA-L3076 (address as above), Secretary of the S.W.I. Group, Victorian Division of the W.I.A. Ian Woodman, WIA-L3008, Assistant Secretary, is also helping to compile the notes with me

Firstly, I would like to thank our past Secretary, Maurie Cox, for his outstanding service as Secretary and writer for the S.W.I. notes. Unfortunately Maurie is forced to lock up his rx, haul down his antenna, and nuckle down to study for his leaving examination, so I wish you all the best Maurie in your studies.

This being our first attempt at writing notes of this nature, I hope you will bear with us and help in making these notes in the magazine a success. So please write either to myself or to Ian with news from your Groups as to what you are doing and future activities. Please don't forget to write. I will answer your letters either personally or in the notes.

VKS NEWAREEL

As Maurice said we have had no news from the Federal Executive about the awards. We have had quite a few very keen f.w.l. coming in to the construction night on the second Friday of each month with their rx's and fully-built rx's for the technical staff to either line-up or find out why they are not operating. We would be very pleased if any Amateurs could assist in the technical side for this night. Ian Woodman was the only Amateur there to assist and I am afraid he did not know whether he

was coming for doing. I was very sorry to hear about your home-bred play-acting man, Alce, think of all the DX's you are missing. Also Maurice may get a few new countries out of this unfortunate incident. Someone was telling me about Noel Harrison's 50 ft. mast, breaking in half just above the guy wires. I hope he had a good fall. I am sure that a potent cold water glue up Noel to stick it together again. Ian Thomas seems to have been concentrating on his swanning for his examinations and also along the lines of Al-fie. Have you found that guilt in your mind? I am sure you are doing up in building up that fat man that I saw twice idle on the shelf.

Yours truly is seriously considering buying a \$6 ft self-supporting windmill tower with prop. pitch motor, etc., and I am hoping to mount a multi-band quad on the top, but the trouble is I will have to get a letter, or at least a "with the intent" order would fit in nicely. Maurice Cox is still listening hard on a.s.b. after getting over a bit of 2nd detector trouble in his rx; it's marvellous what a new valve will do.

In regard to the S.W.I. Convention to be held at Warrnambool on 2nd of March, all are welcome to attend. If anyone is interested, let me know, so as accommodation arrangements etc. can be made. Eric Trebilcock suggested to have a tour over the Fletcher Jones' factory at Warrnambool (we may get a few free samples). Their factory is very well planned out with trees, shrubs and lawns, it should be an interesting sight. Eric

SOUTH AUSTRALIA

Polin says that things are very quiet in the Southeast Georgia area, mainly because of the studying for the A.O.C.P. exams in January. There will be four or five of them sitting for the Limited licence. Dale L2025, who sat for the last exams, has received word that he has passed the Limited exam, but he has not yet received his call sign. Listening at Dale's QTH is limited due to study and the construction of a 2 mhz converter, the line-up on 2 mhz is a xtal locked converter feeding into a No. 19 rx with a tuneable 1.5 of 3-7 Mc. The antenna for 2 mhz is 10 ft. beam on a 12 ft. tower.

Les Dicker, L5036, is busy sorting out his equipment as he has recently moved QTH. His rx set-up sounds quite good, it consists of a home-brew rx originally built by Howard 5XA, consisting of 8 tubes tuning 350 Kc. to 12 Mc. The antenna is a 40 mhz dipole, 67 ft. long. At present Les is building converters to cover 28, 50, 144 and 288 Mc., using a 6J6 as

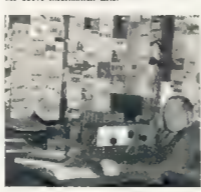
tralian Division of the W.I.A. regarding the publication of such a magazine. He is all in favour of the move to create interest in the S.W.I. Groups, but as yet the President has not heard the views from other members. Official notice will be received as soon as it is confirmed.

Gary L566 has modified a 522 rx for 2 mcs and is very pleased with the results so far. Col SCJ gave Gary a call so that he could find the band and peak up the coils, but as yet he has not heard any other stations. The antenna at present is only a four element, just above the roof of the shack.

RADIO MAIL

I wish to thank the following for their letters: Chas. Abernethy, Peter Drew, Dave Jenkins, John Kennedy, Don Grantley, Harry Major, Colin Hutcheson, and Eric Trebilcock.

Eric Trebilcock.--Here is that man again, with his best cards received in Nov. its 15/11/81:
NA AFSDY IQSL Z9R JNVTU, VQZLE, XH-
6P5D/KCAG, OA4BW, YJHCME JAABK (Zone
23), UUKAG, UIBKAD, UIBAC UQZEKE, VE-
SYD (Zone 2), VKVMJ, and LUZZR (Antarctica).
VKWHS (Macquarie Is.), VQ4DW, VS3FW,
SNIGW (Nepal). Best openings for past month
include KHEDY, JTJKAA (Zone 23), APFCK
(East Pakistan), UG8KAA, VSRM, VRVCV,
KISAU, UA2AB, CRTZ, KOBJ. Thanks for
the above information Eric.



Stonit Harrison, WIA-T-3101, to his shack.

Chas. Abernethy has not received his rx back as yet due to some slight modifications to the rx. However, he has received a 30 Mc. and 100 VKZDS owing from 3/1/61, also cards from WYUW, XEJJP, ZKJAR, GZGL, VESBO, VKGAM and PKRAU, who doubled up and sent him a 100 VKZDS. Chas. has been listening to DX on 144 Mc., 100 miles being the best DX heard. Chas. has just completed a power supply with three outlets, one for 100 Mc., one for 10 Mc. and one for 5 Mc., with one for the volts for his 5 meter. This is quite handy in saving the extra drain on the supply. Chas. has also noted that they have had rain up in VK3 for the past week (RAIN, he says), and has not been doing anything on the week-ends except catch up

John Kennedy has tried out Peter Vernon's method of tuning in s.b.b. with two dual wave rx's. He managed to tune in a W8LLI on 20 mhz (what has happened to the old f.o.l.) and a W8JH which is listening to some DX station. The W8JH is the proposed 3T Stations heard on 14 and 81 Mc. were ZSICD VRIG and VKORF. These stations were heard during the Jamboree of the Air and the bands were very crowded.

Peter Fields has dropped me a few lines describing his rig. It consists of a 13-tube unknown make rx (who cares as long as it works) and two ex-B.A.F. converters covering 21, 28 and 50 Mc. The rx itself without converters covers 1.5, 3.5, 7, and 14 Mc. The only antenna Peter has up at present is a coax-fed 7 Mc. dipole up 30 ft. in the air. It is used on all bands including 6 m. Peter has heard

some good DX on 6 mx, they were VKs 2ZLP, 4NG, 2AQI, 2ZER, 2ZGL, 42CD, 7AJ, 7AQ and also Peter thinks 8AV. Every station was running a 5 by 3 except 8AV. (DX sounds very good over in VKs land) Some of the latest QSLs received by Peter are HB/KU, JA1BR, VR4CB, VR8RZ, JA2KX, WB5JZ/KH0, W8WT

Sorry to hear that Harry Major has not been able to attend our meetings as he hoped, but we will make a special effort to attend the Xmas break-up on 8th Dec. Harry uses a rx & 3-tube short wave set and is fed with a 20 ft. twin wire antenna running north and south across the room; it brings in many of the bigger overseas short wave stations, besides a number of the Australian stations. Harry received a card from Switzerland a few weeks ago, but it is of very poor design. This station is heard regularly on Saturday afternoons about 3 p.m.

Now a few words from the "Ears of Ned" lands: Peter's rx set-up on 80 mx is a home-brewed 3-tube regenerative. The antenna is a 1/2 in. long wire, 7 ft. high. For s.b. on 80 Peter uses a dual wave rx in conjunction with the regenerative rx for c.w. and s.b. (no, not another one). 40 mx rx is a 6-valve dual wave rx, 1933 model, which has no f. stage. Antenna is a 1/2 in. long wire, 40 ft. high, which is fed with twin flex (about 180 ohms). For 20 mx the same dual wave rx is used, so that is the rx set-up of Peter's and how he receives all the DX I will never know; perhaps he has a very good location. Peter also has a 20 to 40 transformer dual wave rx which covers 20 and 40 metres.

Dave L33 has not been very active on the listening side, because he has to milk the cows, etc., and turn around and prepare his own meals. Dave has heard some Europeans on the radio occasionally but has not heard anything in the morning. The DX total is 141 countries heard and 10 confirmed. Dave says that he has not got around to sending out any QSL cards, but he is planning when he gets settled down on the farm. A start has been made on the construction of a converter covering 14, 31 and 33 Mc. using transistors with an s.s. stage. Dave finds a few signals on the radio from Europe 15-20 minutes before 0600 hrs. to 0600 hrs. E.S.T. also a few W. com.

Don L3888 has been hearing some terrible DX up on the border. He has heard in Nov. to date 43 stations. Don heard CTAB and also V8RAAC early one morning.

Well that's it chaps for this issue, so I would like to wish you all a Happy and Prosperous New Year. 73, and the best of DX, Robert F. Jones

DK LADDER

	Countries		Zns.	S.a.b.		W
	Conf.	Hrd.		Conf.	Hrd.	
274	280	40	—	—	80	
91	234	37	—	72	—	
76	187	31	31	82	—	
65	207	23	5	90	11	
25	309	30	4	114	13	
30	87	21	—	—	12	
28	170	17	8	64	4	
28	133	—	—	—	—	
30	84	17	—	—	28	
10	141	7	—	—	—	
9	44	—	—	—	—	



UNUSUAL CONTACT

It may perhaps interest readers of the magazine if I report the details of a three-way contact last night (28th Nov.), using 14 Mc. phone.

At 2115 hrs. E.A.S.T VK4XE/MM, ZLIAOV/Aero Mobile and my own station VK3APL were in communication with each other. VK4XE/MM was on a small vessel 150 miles north of Cairns, and ZLIAOV/Aero Mobile was flying from Darwin to Brisbane, en route to New Zealand. The ship was Q8A5 58 and the aircraft Q8A5 58.

I feel that possibly this QSO was unique in VK Amateur Radio, and submit these details for members' information.

—Neville A. Loftman, VK2APL.

V.h.f. Amateurs, like lower band operators, are more or less divided into those who like rag-chewing, the DX enthusiast, the mobliester, the experimenter, and so on. Judging by the increased amount of activity in the USED sections of our v.h.f. bands, it would appear to be about time some system of segregation and channeling procedure was introduced on a basis similar to that found on the lower bands in various parts of the world. How many times have you attempted to copy a weak K signal buried beneath a local station? How many times has an unsuspecting local rag-chewer come up on top of the DX signal in the middle of your contact? How many times have you tried to copy a weak fluttery inebell signal right alongside the highbeats of a strong local? How many times . . . and so on.

These, and many other instances of unnecessary interference, could perhaps be partially prevented if the v.h.f. bands were voluntarily divided into segments to provide reasonably clear channels for c.w., DX skeds, mobile, etc.

The two-bands mainly concerned are 6 and 12 metres where most of the activity is crammed into the lower megacycle.

Does the v.h.f. activity in your State warrant further subdivision? If so, how? If not, what about acting promptly, and helping to diminish the increasing amount of unnecessary interference on the v.h.f. bands?

As you can see, the v.h.f. notes this month are published as presented by the v.h.f. scribblers in each State. If you feel that news from your area is not included in these notes because you are isolated from the V.h.f. Group in your State, how about appointing yourself a news correspondent and forwarding any items of interest to your State Editor.

Thus, of course, applies to everybody. The scribblers cannot make the news and they cannot monitor the bands all the time. Therefore they can only be as informative as they are interested in you, the active v.h.f. Amateur, cares to make them. Remember the fact that there is no news from your area is your own fault.

By this time the Ross Huil Contest will be in full swing. I hope that a greater number of v.h.f. stations will contest this year. Even if you realise you don't have much chance of winning a section, still enter a log.

Also this season, with two active VK8 stations in the 6 m band, it is informative and interesting to call. David, there should be quite a number of Amateurs qualifying for the 6 m W.A.S. award.

NEW SOUTH WALES

VK3WJ, the NSW Divisional station at Dural, has, since mid-November, been operating on the 6 m band. The morning and evening broadcasts are being done on 50.16 Mc. The rig at the moment is a 5753 2528 832A, running 80 watts to a dipole 35 ft. high, running almost due east and west. Modulator is a pair of 807's driven from the station audio network. It is expected in the near future to increase power to 100 watts, change frequency to 50.14 Mc. and erect a turnstyle antenna. Thanks go to members of the Dural Council and the V.h.f. Group for this transmitter.

VICTORIA

After several months of very low activity 6 metres is becoming more popular with several openings to incite the interest. Very weak VK4 signals were heard on the afternoon of 13th Nov. The first was heard very early in the morn'g at lunch time on 13th Nov when Jan 32HP worked 4AZZ. The signals were not very strong but they certainly bear the 6 m note.

On Friday, 17th Nov. 4HCG was heard working 7ZAA, and then a VK5, but faded out at 1135 hrs.

Then on Tuesday, 20th Nov. Between 1800 and 2000 hrs., the first big break-through to VK4 occurred. The VK4 stations logged were 4AZZ, 4ZAW, 4ZMR, 4ZLN, 4ZLW and 4HCG. Signs were of reasonable strength, but were a bit of QSB. The thoughts of the VK4 operators were while they could hear the VK4 stations without any trouble they had great difficulty in making contacts with them.

Graeme 3ZIX reports that on 24th Nov. at 1900 hrs. he worked 4ZLW on 57.5 Mc. with a QSB, and also heard 4FG. Then at 1900 hrs.

the same evening Graeme heard 8AV at Daily Waters working a VK3. Signals were 5 and 7 with heavy QSB. Unfortunately Graeme was unable to copy the call.

On 28th Nov. at 1915 hrs. and on 29th Nov. at 1830 hrs., several weak VK4 signals were heard but no contacts made. Again on 1st Dec. at 1900 hrs. 4FG was heard very weakly.

On the morning of 2nd Dec. several weak 7L signals were heard, but no contacts made. Then at 1230 hrs. the same day, the northern VK4 stations were worked, signals peaking up to 58, with heavy QSB. But at 1730 hrs. the ship shifted south and the southern VK4 stations came through with possibly the strongest signals ever heard from them—6 plus, plus. This side of affairs only lasted for ten minutes then the ship shifted back to the northern stations again.

Jan 3ALZ has now erected his 30 ft. long yagi 8 m and intends to be right amongst the DX this season. He has a 400 ft. cable connected tropospheric skeds with 4ZAZ on 1st Dec. and will be keeping these skeds at 1945 and 2245 hrs. nightly.

A new station on 6 m in Melbourne is Mervyn 3ZMC, located at Frankston. He is running his rig into a VT501 and uses a 4 el. yagi. The usual 1/2 tube beam lock converter is used for receiving.

The final 6 m scramble in the series of six was held on 26th Nov. with 32CP as control station. Nineteen stations participated. John 3ZJV at Olinda was the winner with 17 contacts. The overall winners for the series are Peter 3ZDO with a total score of 84 contacts, second was Ivan 3ASG, 70 contacts; and third was David 3GV with 68 contacts. The next 8 m scramble will be held on 30th Nov. at 1900 hrs., commencing at 1945 hrs. Keep the date and time in mind.

Active on 6 m appeared to drop off quite a bit during Nov. but there were still some interesting contacts made. At 2000 hrs. on 8th Nov. 3ZCG at Morwell worked 7LZ and 7BQ. On 9th Nov. 3ZDP at Werribee worked 7BQ and 3DV at Maffra also worked 7LZ and 7BQ. On 8th Nov. conditions were still very good and 3ZCG worked 3ZLW, 3ZLW worked 3ZAG and 3ZAG at Warragul worked 3FO and 3ZIK at Castlemaine. On 7th Nov. 3ZAO contacted 3JW at Beaufort, and on 10th Nov. 3ZCT at Sale heard 3JL but was unable to contact.

On 10th Nov. 3ZDP had a field day, working Melbourne stations. 3AW's sigs were heard on the morning of 11th Nov. but no contacts made. 3ZLJ had a contact with 3AW on the morning of 18th Nov. and the same evening heard 7W1 P on Mt. Wellington, but was unable to get his rig fired up before they closed down.

Several new stations appeared on 2 m during the month including 3AFJ, who operates portable from the Y.M.C.A., mainly on Tuesday evenings. 3ARX has been working on 2 m and is using the ever-popular 32Z on 144.162 Mc. Antenna is a 8 el. yagi up 24 ft. 3IX, at Easenden, an old-timer to Amateur Radio, has also appeared on the band using a 32Z into a 3 el. yagi.

3ZMJ (Sale) is now active on 144.163 Mc. and 3ZMK (Moorabbin) has appeared on 144.31 Mc. using a 32 el. phased array. 3ANS (Wangaratta) is no new face but is now fired up at Wangaratta using a 15 over 18 yagi and assures me that in the Melbourne direction there is a big gap in the hills. 3ALZ has re-built his antenna farm and will be using two stacked 30 ft. arrays on 2 m. 3NUN (Mulleigh) is very interested in 2 m and has heard Melbourne signals on a number of occasions. Each Wednesday morning from 1300 to 1330 hrs. he particularly looks for Melbourne contacts. Rich has also heard 3ZCJ several times.

The 3 m scramble on 13th Nov. resulted as follows: 32CP as control station, 32Z as 42 points; city section 3ZCB first with 22 pts. In the overall scoring for the series, 3ARX was the winner with a terrific total of 320 pts; 32CP at Bulla with 110 pts; 35 pts; city section 3ZCB was the winner with 141 pts. 3ALZ second with 130 pts. The next 3 m scramble will be held on Sunday, 14th Jan. at 1945 hrs.

The Nov. 2 m fox hunt was won by Tom 3AOK who used a 10 over 12 yagi. The hunt point was that on 30th Nov. 3AAU was heard calling CQ on c.w. on 50.4 Mc. at 1900 hrs. W.A.S.T. However it would appear that his rx was not as good as his tx and he did not

one of the most successful field days for some time. Most of the activity took place on 2 m. The highest score for the day was returned by 3ZLW on Mt. Donna Buang, who worked 32 stations for 34 points, plus 40-pt bonus for longest distance worked. 363 miles to 7W1 P. 7W1 P worked five VK3 stations and greatly contributed to the interest and success of the field day.

The Jan. field day will be held on Sunday, 1st and once again, 7W1 P will be on Mt. Wellington. Full rules for these field days appeared in the v.h.f. notes in "A.R." Sept. '61.

The Jan. meeting of the V.h.f. Group will be held on Wed. 17th, but you will have to listen to the Sunday 3W1 broadcasts to find out the location.

Please note that because of a course of study which will consume most of my spare time for the next three years, I have reluctantly had to relinquish the job of Publicity Officer for the VK3 V.h.f. Group. Len 3ZCF will be filling in until the election in May and I hope that you will keep him supplied with news items for both the broadcasts and these notes.—3ARZ.

QUEENSLAND

Brisbane: There were quite a number of openings on 6 m during Nov. details as follows:

To JA—25/11/61, 26/11/61
— VK3—21/11/61,
— VK3—9/11/61, 21/11/61,
— VK3—15/11/61, 21/11/61, 24/11/61
— VK7—16, 17, 18, and 21/11/61

A new station on 6 m is 4ZAW who runs 30w, input, to a 2236 in the final. Modulation is 100% and he has a 10 ft. antenna for transmitting is a four el. beam. Receiving is via a dipole, and a t.v. turret tuner fed into a Comander.

Brian 4ZAP and his wife, Pam, have been in Dalby for a couple of weeks and returned to Brisbane on 19th Nov. While in Dalby, Brian worked the last Y.A.F. Group meeting (a 8 el. yagi). He worked the Brisbane boys regularly over a distance of 130 miles, even though 4ZAP had a 10 ft. beam. He also worked the sliding Range which inconveniently cuts between the two places.

The 2 m hidden tx hunt was held on 3rd Nov. and took the form of a fox hunt. 4ZAX was the fox and after an interesting evening, finally stopped at the place where supper was to be held. Ten cars participated in the hunt.

Dane 4ZAX now has an excellent antenna system for this band, consisting of four yagis of 14 elements each at a height of 80 ft. He has been hearing signals on a frequency of 144.023 Mc. via the medium of meteor trail reflections, and shortly will be connecting up a parametric r.f. stage.

The last Y.A.F. Group meeting was held at the home of Ron 4ZBZ and 17 people were present. A tape recording of the lecture by W. J. Wilson was made. The speaker was a log of 4ZBY who achieved fame by working a JA with a tx running 170w. Input attached to his motor cycle.

A visitor to Brisbane, Rick 4ZWL, who is on a three-weeks' holiday from Cairns, has been visiting various shacks. Rick is very impressed at the size and complexity of some of the rigs constructed by the v.h.f. gang.—4ZBT

WESTERN AUSTRALIA

Well here we are again and unfortunately I have in apologise for no v.h.f. notes from VK6 appearing in last month's "A.R.". This, however, was not because they were not written or not sent, but because they were not published but because the day after the notes were sent I was advised that David 3AAU had shifted to 6 m and obviously they did not catch up with him.

V.h.f. activity has taken a rise with many v.h.f. stations heard and worked on both 50 and 144 Mc. Several reasons could possibly be offered for this, however we are not really concerned as to why but very pleased that this is the case.

The DX on 6 m seems as though it could prove quite interesting this year with three openings on 6 m and very interesting. The hunt point was that on 30th Nov. 3AAU was heard calling CQ on c.w. on 50.4 Mc. at 1900 hrs. W.A.S.T. However it would appear that his rx was not as good as his tx and he did not

(Continued on Page 19)

Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

GENTLEMEN'S AGREEMENT

Editor "A.R.," Dear Sir,
I write to you in the first of October on the abolition of c.w. He refers to the "Gentlemen's Agreement" as "an agreement which, to most, never existed." Is he presenting the viewpoint of the non-gentlemen?

The rest of his repetitive letter—I refer to his earlier one on the same lines—was dealt with in previous correspondence.

J. C. Redman, VK3JE.

Editor "A.R.," Dear Sir,

I wish to protest against your action in receiving the letter by Keith Jones in October "A.R."

You saw fit not to print a letter of mine in reply to Roth's previous correspondence on the abolition of c.w. from the Amateur bands, stating that "correspondence is now closed."

This I was prepared to accept, but I am not prepared to accept your decision to re-open the subject again under the guise of "abolition of the Gentlemen's Agreement" and use to raise the previous subject of the abolition of c.w. on which "correspondence is closed."

Unfortunately the Postal Department did not deliver "A.R." until today, too late for material in Nov. "A.R." but I feel very strongly about this discrimination

—F. T. Hine, VK3QI.

Editor "A.R.," Dear Sir,

The Gentlemen's Agreement is recognised throughout the world and should only be altered after a world-wide investigation proves operating habits have changed away from c.w.

After operating a.m., s.a.b., and c.w., it appears that s.a.b. is replacing a.m. on some or other grounds. I am sure that it should eventually take over more of the a.m. sections. We have more room for phone here than in A.A. and Ham in Ham. Turnover of over 200,000 is considered no wonder many Wa. including New Hams, turn to c.w.

A point often overlooked in favour of telephony—it can be regarded as an international language enabling contacts with distant Hams who have not mastered sufficient English to write phone.

We should consider c.w. operators in other countries who are forced to use c.w. for many reasons and give them the opportunity to use telephony. This would be possible on 7 Mc. if local phone nets spread out all across the band.

Perhaps c.w. should be encouraged on bands such as 7 and 14 Mc. where we have so little room, s.a.b. requires the channel space of many c.w. stations and 14 Mc. c.w. would be one way of restricting the number of available operating channels. There should be room for all phases of our hobby.

Hand sent telephony may be on the way out for commercial traffic, but even here is often replaced by another form of telephony, such as teletype. C.w. still brings pleasure to thousands of Hams throughout the world and proves a reliable method for long distant work through interference. Take a listen any evening and compare the readability of c.w. stations in the first 50 Kc of the 7 Mc. band with so few readable Amateur DX stations getting through on phone throughout the remaining 250 Kc.

International DX contests usually show twice the number of c.w. logs are received in phone bands resulting in higher scores. Check our DXCC list to find c.w. membership outweighs phone. To date it is hard to find any evidence that c.w. is outmoded. There are still plenty of c.w. activity on 7 and 14 Mc. and no law to prevent us using a.m. or s.a.b. on the first few Kc.—only Good Manners.

—Les Brennan, VK4XJ.

Editor "A.R.," Dear Sir,

In view of Mr Roth Jones' remarks regarding c.w. operation in the Amateur bands, I feel it would be rather appropriate to quote an extract from the R.S.G.B. Bulletin, August 1961, page 75. The Bulletin says: "A recent survey by A.I.E. revealed that the preferred mode of operation of U.S. stations, expressed as a percentage of the total, was—c.w. 34%, a.m. 28%, s.a.b. 23%, r.t.t. 1.5%, f.m. 0.3%, and others including l.v. 0.8%." It would ap-

pear that 33.8% have no preferred mode of operation.

The Bulletin continues, "It is reported that there are now 217,102 current Amateur licensees in the U.S.A. and 34% is 73,814. It is suggested that 73,814 Amateurs are not inconsiderable."

I feel little comment is necessary, except to suggest that his friend in the Australian Research Department could be more usefully employed elsewhere.

Cyril Rylatt, VK3TC.

Editor "A.R.," Dear Sir,

I feel that some comment should be made on the subject of dividing the bands into phone and c.w. sections.

Almost all the other Amateurs in the world are only allowed to use phone in certain sections of the various bands, under the terms of their licences. In this country a Gentlemen's Agreement only restricts the use of phone to sections other than the low frequency end of each high frequency band and so far this Gentlemen's Agreement has worked very well. It so happens that the divisions of our agreement fit in well with those in force overseas.

I think I am one who can claim to be neither a phone or c.w. man; I run skeds on both, I've won contests using each system and it is obvious that we are fortunate in being able to use either mode as we wish.

Phone is ideal for the homey side of Ham-Radio—comparing notes with neighbours, idle nattering across town, and regular skeds with old friends. Given a good circuit it affords a more personal means of contact and a quick exchange of information.

C.w. unfortunately requires the acquisition of a skill in operating—this does not only mean being a telegraphist, a whole lot of other qualities are required to be cultivated also—an appreciation of exactly when and on exactly which frequency to call in which speed, and for how long, to send to the other operator, taking into account the band environment, propagation conditions, and both ends of the circuit, and your judgment as to what he can cope with anyway.

C.w. will give a whole range of operating conditions from battling in an almost hopeless double to peeling off a string of Yanks at whatever speed one chooses. For some reason or other, once proficiency has been achieved, it is a most relaxing pastime. The wide variety of operators and signals encountered lends flavour to a most satisfying exercise. You can sense the wild excitement of the novice

at the other end as he works his first VK at five words per minute, or you can exchange snippets of "info" at breakfast speed with the "big gun." Somehow, on c.w., the finiteness of the average contact does not seem so obvious, and QSOs are more phone-like, certainly more complete. It is a great shame that most of our annual public listeners Judge Amateurs in general by what they hear on phone.

To have to do without one mode or other would be a great loss, but it is inherently very difficult to work close to it is inherently very so we should honour our Gentlemen's Agreement and keep out of the c.w. bands when we can phone.

We should beware of "market surveys," "consumer polls" and the like, conducted by "business consultants" or "research agencies" and use our own judgment according to what we can hear with our own receivers. I am not suggesting, of course, that the figures quoted in your columns a few months ago were the normal "figures-to-suit-the-boss" that these people are so facile in producing.

Re-read, Sir, your Editorial in the October issue, note the results of unilateral action by one Amateur body in this respect, and leave this alone.

Before anyone quotes a letter I wrote to you shortly after the war, and in which I wrote that "c.w. operators can be turned out like sausages, and from similar material," I must say that I was obviously a very immature little boy at that time.

—"Tubby" Vale, VK3NO.

PUBLICATIONS AVAILABLE FROM FEDERAL TREASURER, W.I.A.

"Call Book Magazine" Back numbers (mostly recent) of the great American directory of Amateurs are available at £1, post paid (about 10p each). New editions have been issued by Federal Officers and are in post-nom condition. Available at the moment are—
World-wide, October 1961.
World-Wide, called Jan. '62, April '62, Jan. '61, April '61, July '61.

There is also an English publication of a different character: "A Guide to Amateur Radio" (the new edition). This is an excellent handbook for the beginner, with a lot for the experienced Ham too. 5/-, post paid.
Revised edition of "Federal Directory W.I.A." Bob Boase, VK2NI, 50 Cardigan St., Carlton, N.3, Vic.

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Sub Editor: BUD POUNSETT, VK2AQJ,

6 Alice Street, Queanbeyan, N.S.W.

ADDRESS CORRESPONDENCE FOR THIS PAGE DIRECT TO THE SUB EDITOR

SUGGESTED OPERATING RULES FOR SINGLE SIDEBAND WORKING

FROM ALAN H. REID, VK3AHR

OPERATING FACILITIES REQUIRED

- The V.F.o. operation is essential
- The V.F.o. must be stable
- The station receiver must be reasonably well calibrated, sufficiently so to give a frequency reading preferably to within 1 kc. Alternatively, a quickly-readable frequency meter is necessary.
- One switch operation, preferably of the "press-to-talk" type, is required. Vox operation is, of course, permissible, but by no means essential.
- Accurate and quick setting of the transmitter on to the receiver frequency is necessary.

PREFERRED OPERATING METHODS

- General Commands.** Except under special circumstances, all stations taking part in the QSO should be on the one frequency. This is important as it leaves more channels clear, facilitates break-in of an additional station when desirable, and allows the operator to know almost everything that is going on right through the QSO.
- Use only the sideband (upper or lower) accepted as being standard for the particular band.
- Before first transmitting after a period of shut-down, select your channel carefully, after checking over the band. Listen on it for say half-a-minute before transmitting, and if the band is really busy, first say "is this channel occupied?" or "Will I be causing any interference if I use this channel?" Look out for any possible break-in and request to move after starting your first call.

VHF NOTES

(Continued from Page 17)

acknowledge calls made to him and his sign eventually faded out, leaving a disappointed ERV. From this it would appear that David's request to keep the first 100 kc segment of the band clear is a waste of time anyway because his rx does not hear stations, hi! This is just as well for David for his comments in Oct. - "A.R. notes."

VK6VV came through on 56 Mc. about a fortnight ago and this is only the second time he has broken through from Geraldton. These types of things most certainly keep the interest in the bands. Hope to hear you again very soon Brian.

The last tx hunt was on 8 mX and the antennae used were quite amusing. One ex-VK2 type rolled up with a comical quad perched on the front of his Mini, complete with mum's broom for a support. The winners were Lance 6ZBK and Gill 6ZBW and although ERV did not arrive on the scene until about third or fourth, was second in. Next hunt could prove to be interesting as it will be our Christmas outing and speculation as to what it will be quite keen. It probably will be hand-bride gear operated by XVLA and YLA without any assistance from other hives.

Well, this is about all for now, except that we would like to congratulate Bob 6ZCY on his recent marriage. Please remember the v.h.f. expedition to Cape Naturaliste by Kevin 6ZCB and Stan 6ZAS during January - ERV.

TASMANIA

Although rather belatedly, the 6 mX band finally did the right thing, 16th Nov, with an opening to VK4 and northern VK2. This opening was rather patchy, but some of the newer stations were able to connect their first DX. A repeat performance was staged on the next evening when, once again, we had things on, our own way without the usual opposition from VK1.

Again on 21st Nov, VK5 and VK2 (Sydney area) were worked and a lone VK6 heard.

The eighth month was a quiet one for QSO's operation on 2 mX from Mt Wellington, behind Hobart elevation 4,166 ft. This is the first time we have been able to use this type of gear

(d) Calling CQ. "Hello CQ" three times, with your call once, followed by "listening" or "standing by" is an efficient and adequate call. Perhaps extending on this frequency or "standing by" on this frequency is slightly more desirable. If for some special reason, you want the other man to answer on a different frequency say "Listening on Kc. 1." Listen on the frequency for say 10 seconds before repeating. An answering station should give your call once, his call once and some such remark as "Do you copy?", immediately after you say "listening".

(e) Working a station. Keep the errors short. Don't exceed say 10 seconds, without letting go the tx and having a listen, however brief, on the frequency. The other fellow will probably want to connect with details on your remarks, or he may even not be copying you due to the arrival of QRM on the channel. Actually, the "over", meaning a series of comments with identification calls both before and after, is now redundant and should be scrapped. Normally, never transmit more than, say, 30 seconds without letting the other fellow have a say. As in c.w., don't send "double" i.e. don't repeat your words, unless your report is Q4 or less, or you know that it will be corrected by the other party.

Never cover more than one subject in one transmission. The old method of covering 20 subjects during a 30 minute single transmission, replied to by 30 corresponding comments, again during one transmission from the other party, should be dropped as it is completely inefficient and tedious.

If you find a clear channel, initiate a call and are answered by someone, he should vacate the frequency. If in sideband, he should be contacted on 11, at the end of the QSO, someone comes on and calls him, he should say "let's move off this frequency to Kc. 1." Of course, if you answered that you are closing down, they will continue to use that channel if they wish to.

and results were most gratifying. Five VK3 stations were contacted—four of these were portable field day stations—and four northern VK2 stations, who could not be contacted from Hobart, provided interesting QSO's.

These contacts seem to be basic, ground-wave communications distances are not so great, do not seem to be excessive, especially when coupled with a total height advantage of 6,000 ft. The fact that no Melbourne stations were heard seems to support this.

Although we spent a worrying 90 minutes getting gear set up—everything possible seemed to go wrong—there was, perhaps, so bad. Out host V.L. station had to go off the air to change four rectifiers, or perhaps we should not mention that.

Although we were in the next room to the V.L. gear, we did not detect it in any way and a half wave co-ax stub cleared up most of the interference experienced on 8 mX band.

The effort was not, however, the easy proposition it might seem to others. This was brought home to us when, whilst lowering our 24 ft. Jang beam at 2030 hrs. in a howling, icy, 30 degree gale, a support-very broke, our beam and tower hurtling towards all and sundry.

However, after groping our way through a six ft. visibility mist for a half mile on the way home, we still considered it worth the effort. But we will definitely not be repeating this couple of times per week as suggested.

Now, more than ever, we are determined to work out of Hobart over our mountains (not hills, if you please). ZGAI is working on a parametric amplifier and, in conjunction with ZTBE, trying out passive repeaters. Believe that call TLE in Luncheon on either beam or hearing on ZGAC very consistently during mid-November.

New stations on 3 mX in the south are TZZ and TEC, whose possible use of c.w. should prove quite advantageous.

The next meeting of the V.h.f. Group will be on 18th Jan. and all interested parties are invited particularly any interstate visitors who happen to be in the "Holiday Isle".

Rumour has it that Bryan ZTBE, our Secretary, has applied for a job in VK5, as yet result unknown.

Following the publicity given to 10,000 Mc gear, interest in this is quite high in southern

(f) **Send-Table Operation.** Although often very pleasant, I've heard many good two-way QSO's completely ruined by a break in station. Never try and break-in to QSO unless you can copy all parties to it Q5. Listen to the conversation for a short while to gauge if an addition to the QSO would really be welcome. For instance, don't try and break-in if they are in the middle of a subject of discussion, even if it means waiting for quite a while, or if they are two old friends obviously enjoying a private two-way chat. Don't break-in unless you can contribute something to the QSO. If you just break-in for a report, do so with due humility. This practice is, I suppose, admissible, but only if an appropriate moment in the QSO is selected and if it is made sincere. (Don't include an unsolicited, detailed description of your rig, your location, and a weather report.)

In a round table, it is generally desirable to say to whom you are "passing it", although good operators in a round-table just come in and out, without confusion, whenever they have something to contribute.

It is not your right to be acknowledged and allowed to enter an existing QSO. However, if the above rules are followed, you will usually be welcomed in by both parties.

Don't "identify" unnecessarily. At the start and the finish of a QSO is mandatory, as well as at the intervals specified by the Regulations. There is usually no need to keep identifying every half-minute or so, unless circumstances dictate and your partner suggests this as "tuning chatter", or you know someone else will be looking for you on the band and you wish to make it easier for him to find you.

When finishing a QSO, don't linger. Two "finals" are, I suppose, natural, but three or more are unnecessary. But, naturally, for instance, for a few seconds after finishing a QSO and before switching off.

Tasmania. One unit has been obtained and more are expected. The situation of some of our higher mountains seems to be ideal for work on this band—7240.

W.I.A. D.X.C.C.

Listed below are the highest twelve members in each section. New members and those whose totals have been amended will also be shown.

PHONE

Call	Car. Cnt- No. rise	Call	Car. Cnt- No. rise
VK3AB	45 209	VK3KW	4 206
VK3RU	3 258	VK3ATN	26 204
VK3KH	43 250	VK4HR	13 182
VK3AHO	81 232	VK4RW	23 184
VK3A	81 231	VK3HZ	3 178
VK3WL	16 211	VK3GB	80 171

C.W.

Call No. rise	Car. Cnt. No. rise	Call No. rise	Car. Cnt. No. rise
VK3KH	19 235	VK4HR	13 186
VK3KH	26 234	VK4RU	15 215
VK3VJ	29 264	VK3XU	45 215
VK3V	19 235	VK3VJ	12 187
VK3VJ	15 236	VK3VJ	29 211
VK3BZ	8 222	VK3XK	41 204

Amendment:	Car. Cnt. No. rise
VK3ARX	58 177
VK3AX	58 126

OPEN

Call No. rise	Car. Cnt. No. rise	Call No. rise	Car. Cnt. No. rise
VK2ACK	6 239	VK3HG	3 241
VK4RU	15 215	VK3AHO	81 232
VK4VJ	32 267	VK4HR	13 186
VK3MC	17 235	VK3BZ	4 221
VK3MK	74 234	VK3A	81 232
VK3AGH	24 234	VK3VJ	12 187

Amendment:	Car. Cnt. No. rise
VK3APK	52 145



FEDERAL AND DIVISIONAL MONTHLY NEWS REPORTS

(SEND CORRESPONDENCE DIRECT TO DIVISIONAL REPORTER NAMED AT PARA. END)

FEDERAL

FIFTH JAMBOREE-ON-THE-AIR

20th and 21st OCTOBER, 1962

The following letter was received by F.F. from the District, Boy Scouts' International House, 71 Metcalfe Street, Ottawa 4, Canada: Dear Sirs,

As you will know, the 4th Jamboree-on-the-Air was held over the two days 21st and 22nd October, 1961, and, from the reports so far received from all over the world, it proved very successful indeed. The event has two objects, the first being to enable Scouts everywhere to make contact with other members of the Movement overseas, to talk to them and learn something of their problems and activities. The second object, perhaps the most interesting from your point of view, is to interest them in Amateur Radio, and I am glad to say that we know of quite a number of new Ham's who first "caught the bug" at a previous Jamboree.

We fully realise that this annual event could not take place without the co-operation of the Amateur Radio Society and Scouts everywhere where our great debt of gratitude for their willing co-operation and advice. Obviously I cannot say much as personally and as a Scoutmaster, I very much hope that you will be as sincere thanks through the medium of your Journal.

As indicated above, we propose to hold the 5th Jamboree-on-the-Air over the week-end 20th and 21st October, 1962, from 0901 hours on the 20th to 2300 hours on the 21st, both times being Z time or GMT. I very much hope that this does not clash with any event being organised by your association. If it does, I should be grateful if you would advise me without delay.

With renewed thanks,

(Sgd.) D. C. SPRY, Director.

AUST. CAPITAL TERRITORY

Activity in the VKI area has shown a considerable increase over the past few months so much so that moves have been made for the A.C.T. to become the VKI Division of the Wireless Institute of Australia. This has now been placed on the agenda for the Federal Convention in Perth at Easter and A.C.T. Amateurs are very pleased with the support they have received from the VKI Division in sponsoring this move.

Action has also been taken to have VKI as a separate call area for all awards and contests and A.C.T. Amateurs hope that the Federal Convention will agree to this move and allow the A.C.T. to take its proper place in these activities.

Canberra is the fastest-growing city in Australia these days and this growth is particularly noticeable amongst the Ham fraternity. Some of the new Amateurs are local lads who have completed their exams for the A.O.C.U. but a number are old Hams who have migrated here from VKI and VKZ. If the present growth continues, in twelve months' time there could well be twice the number of Amateurs that there are at the time of writing.

On behalf of the local lads a warm welcome is extended to these newcomers and it is to be hoped that they will soon become active and help in the interest of the VKI Division. Up to date information on local activity for the newcomers particularly, but also for anyone else interested, is available at £5 a week Saturday on about 7000 Kc. when the VKI weekly round-up operates and when it is quite usual to have up to a dozen VKIs and some VKZs and even a border discussion and planning local activity.

It is proposed shortly to introduce a net possible for VKI and VKZ. This netting should provide a stimulus to 2 or 3 net enthusiasts in southern N.E.W. as well as in the A.C.T.

At the Annual General Meeting of the Canberra Radio Society, the annual report showed that there had generally, throughout the year, been a great increase in Amateur activity. In particular this is noticeable in the two new radio clubs in the Territory. VKILS at Lynsme School and VKIMM at the "Police Boys' Club". Operating under the direction of Education Officer Ken VKIKM these clubs have about 90 active members who will, it is hoped, maintain their interest and eventually add to the local activity under their own call signs. The Society is particularly pleased with the local effort in the R.D. Contest when 18 VKIs were on the air and there are hopes that at least one of the top scorers will be a VKI. New sound will be the growth of activity. It would be possible to have at least 10 VKIs in the Contest and as a separate call area and perhaps a separate Division, local enthusiasts could be rewarded.

W.I.C.E.N. activity of VKI Division has been supported during the year and it is expected that a VKI I.C. group will commence operation shortly. The Government has proposed the establishment of an A.C.T. Civil Defence Organisation and local Amateurs will be taking part in this. The group has been maintained with VKI W.I.C.E.N. net because of the common interest.

The Society station, VKIACA, was in operation during the Jamboree-on-the-Air and about 60 Scouts made contact with various parts of the world and exchanged views.

A big word of welcome is being built by the Society under the direction of Vice-President Eddie IVE. Shortly, it should be practising a low level signal from an element phased array and will have hopes of regular contacts with Sydney and perhaps with more distant places.

On the personal side we hear that Ted IAGP has taken an XYL. She has not been sighted at any Society activity as yet or heard over the air. The XYL has been a very nice girl and has added yet another enthusiast and not lost us an Amateur—1DG.

NEW SOUTH WALES

GENERAL MEETING

The monthly meeting of the N.S.W. Division was held at Science House, Gloucester St., Sydney on 14th Nov. The meeting was a very pleasant one and the weather, which has been exceptional in Syd-

ney for some weeks, the attendance was satisfactory. The meeting was opened by the President, Bill YTB, at 8 p.m. and the necessary formalities were dealt with.

The lecture arranged for the meeting was given by three members, Harold SAAN, Syd ZSG, and Ted JACD; the subject being "Cubic Ques". The subject was dealt with from both the technical and the practical angles and a number of questions were posed by members of the audience. The vote of thanks was moved by Max ZDE.

ANNUAL CONVENTION

The 18th Annual Convention of the N.S.W. Division will be held on the Anniversary Week-end in January from 28th to 30th inclusive. The opening event will be the general meeting for January, which will be held at Science House, Gloucester Street, Sydney, commencing at 8 p.m. at which a topical interest lecture has been arranged. The lecturer will be Bob Wilson, of Strimberg Carlson Ltd., and his subject, "Linear Amplifiers". We are expecting a large roll up on this occasion, especially those country visitors who are in town, so you will be advised as the date nears.

On the following day, Saturday, a Dinner will be held at "Ivanhoe", 48 William Street, Hornsby. The charge for this Dinner will be £5 per person and bookings are being received by Ted Whiting, 16 Louder Street, Five Dock, N.S.W. Full details of the evening will be found in your Bulletin.

A Field Day will be held on the Sunday with features for all. This will be at Quarry Road, Dural, the home of VKIWI and events will be arranged for all-mobbing, v.h.f. section, displays, demonstrations, competitions and a heap of fun for all the family. Disposals will be there in force, also.

So farewell, make this week-end a must, bring the family and really have yourself a day, meeting the other fellow and winning some of the fabulous prizes which are up for the winning. See you at the Convention?

Many thanks to those who have assisted in the compilation of material for these notes throughout 1961, and to all a very Happy New Year.

WINTER BRANCH

Although no registered plumbers were present at the Nov. meeting, there was no shortage of pipes and fittings. I refer, of course, to the two metre lecture and the associated equipment. The man behind the beam was Major ZRU, ably assisted by Fred IALA and Bob SENE, all members of the General Civil Radio Club. Local members were entertained and informed on some of the mysteries of v.h.f. Most impressive array of gear was there to be seen, including a miniature transmitter power supply.

Although I forgot to state earlier, there were some visitors, some associates and sixteen members to watch at the time. To add insult to injury, a vote was taken during the meeting as to the band to be used for Monday night broadcasts. After discussion the merits of 40, 60, 2, a.s.b. d.b. and the proverbial inverted car trumpet, it was decided to broadcast on the other side of the band. I consulted on the matter. At this juncture, some youth was from the two and nine suggested that the aforesaid gentleman be asked to do the honours and the other side of the band on what band they would. He said they'd still hear him. Whether or not this suggestion was heeded, I do not know. The next day, I broadcast. I heard sounded like a mixture of the lot, and, after rapidly winding all about the place to follow proceedings, I gave up and listened to the other side of the band. I did work to listeners in this instance, 13.3 to 1.

Did I diverge? Well to get back to the meeting. The generous gift of no less than four lot the way to the meeting. The next day, I broadcast. I heard sounded like a mixture of the lot, and, after rapidly winding all about the place to follow proceedings, I gave up and listened to the other side of the band. I did work to listeners in this instance, 13.3 to 1.

FEDERAL QSL BUREAU

The expected activity by the Elizabeth Radio Club on Nov. 30 did not eventuate, due to the loss of several of the more active members and because other members did not complete rebuilding plans in time.

The Taiwan American Radio Club publicize their BV award. Non call stations must contact two BV stations after Jan. 1, 1962. New applicants must indicate they desire the basic certificate and submit a certified log extracts. Together with three I.R.C. to Taiwan American Radio Club, Box 24, U.S.T.C.D., A.P.O. 63, San Francisco, Calif.

The East Bay Section of A.R.R.L. announce their BV award for contacting 300V of A.R.R.L. after Jan. 1, 1962. The award is issued in six classes, the minimum being Class for contacting 15 SCM's. Applications with either QSLs or certified list and I.R.C. to cover return postage to W6Q/W, B. W. Southwest, SCM East Bay Section A.R.R.L., 300 S. Seventh St., Dixon, Calif., U.S.A.

The Award Hunters' Club reports steady growth in membership and plans to resume its monthly bulletins early in 1962. Each monthly bulletin will contain 10 sheets of award rules and details. The annual fee is 24 I.R.C. or the equivalent of three dollars. The Hon. Sec. is HENRY J. L. 44, 36, Lane, Helsinki, Finland. Further information may be obtained from this Bureau.

A Russian Call Book has been published by the Polar Radio Club (Sweden). It lists 1,000 I.R.C. from all rare U districts. Price is 20 I.R.C. or two dollars. The Club QTH is SL320, Sven Elfvig, Solgardsgatan 15, Ornskoldsvik, Sweden.

The P.K.Z. is staging the "Millennium SF Contest 1962" for c.w. from 3000Z April 7 to 3000Z April 8, 1963, and for phone 3000Z April 7 to 3000Z April 8, 1963. Further information from this Bureau.

A further change in the A.R.R.L. QSL set-up is W6MSQ. Ray P. Birren, 708 Spring Road, Simsbury, Conn. He replaces W6SGO and handles WKs call area.

Ray Jones, VKERJ, Manager.

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NEW RELEASES for the NEW YEAR from **WARBURTON FRANKI**

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matter, but I have discovered that he has his eyes on the prize. His name is Cliff, his name is Beth, her uncle is a Radio Amateur (this call I do not know), and last but not least, in view of his reported appetite, he has included, kitchen in the plans of the proposed domicile, but is settling for a field kitchen!

Peter S5C came along to the meeting, and in the midst of setting up a tower and a quad. Dave SDB-Doctor Mac to you—was bemoaning the loss of his 7 Mr. antenna, plus the loss of the first Sun and therefore is not very active on the air at the moment. All SMD noticed walking down one of our main streets at a very fast clip, minus hat and sandals, and in the hope that I would find out just what was doing, but the pace was too fast for me. My last glimpse of him was at the back of the ambulance! Frank SMZ still in one piece, wonders will never cease, was noticed on the road, carrying a large bag, and a birthday party, complete with a billy and a plastic bag full of cake; what a man!

Doe SMD was on the sick list at the meeting night and therefore no minutes of the meeting. The doctor has said that the wall is too high for me to snoop over Ian S4X, late of Elizabeth, heard from SMC on 10/10/67, on Wednesday, and he did not back. John SJC, whom I mentioned was not at the meeting to take the chair, tells me that he has had the uncles of all carburisers. When I asked him if he was eating his meals off the mantelpiece, he became quite common and roared, informing me in no uncertain manner that he was on the 4G.

Luke SLL is delving in the realms of tape recording with the idea of sending a tape to W land. So far he has been rubbing himself out and has been possible to make a tape with an spontaneous regularity. At least it has been highly educational for him, he now knows the difference between a single and double track music and has been able to make a tape in one of the same time. He has been enthusiastic about portable Amateur Radio from his recent sojourn at Lake Bonney. He told me in one of the same time that he had been that he supposed when he returned home he would lose his new-found enthusiasm for radio. How wrong can he be?

Now the VK3 will tell you that we have a Divisional Journal that comes out at frequent intervals. Everybody will tell you that it is a good one, and you may read every word printed in it. Also, that Brian SCA, who edits it, should be very proud of it, and yet every now and then up bobs the excuse that they have never noticed any reference to subscriptions being due to the Division. For the past couple of years, in an attempt to save the members postage, the notice of annual subscription being due has been included in the Journal which comes out round about February or March. Bearing this in mind, please read the paper carefully, please, please, please, and if you have not noticed your subscription being due to the Division, I thank you. I thank you! I thank you!

Just in case by now there are any of my readers left who might feel like asking a point or even betting on the accuracy of a previous paragraph on the low track owner in VK3, who was convicted for using a car, I am in the paper this week that another conviction was recorded against a person for having maintained an appliance for the purpose of intercepting and listening to messages. He admitted having affixed a converter to a broadcast rx which could then be used to listen in to a police message. An appeal was made to the magistrate to condemn the radio set, at the discretion of the Attorney-General. Incidentally, he was fined £10 with £4/2/ costs, which is better than listening in anyone's language. Still want to argue?

Well, here we are again. The old year on the way out and the new year on the way in. The VK3 Division, I am sure, is a happy and Prosperous New Year. To those who have

agreed with me, and even to those who have agreed to differ with me, I say, keep up the good work in 1968, and either I will convert you, or I will be converted by you. However always remember that when you hear the ball bounce, it must be made to bounce to the credit of our grand old hobby Amateur Radio.

Now for the payoff—VK4 please note. To that handsome fellow on the committee, man of letters, my pal—wally—the Editor, to say nothing of that hardworking, clearheaded, handsome specimen of a man, the VK4 Committee, may I thank you all for putting up with my humble efforts this year, and if you all could see your way clear to tack another feather in my modest sash, you would all continue to rise in my estimation. If that does not prove that I can crawl as well as VK4, man, I will give you a game of 21. SP3 Pandey to you. (Salary is now doubled—Ed.).

WESTERN AUSTRALIA

The highlight of the October general meeting was the lecture given on the Mercury Project and the Murchison salinity. Jack Walker at the monthly meeting. This was most interesting and very ably given. Mr. Walker knows his salinity backwards and seldom referred to notes during his hour and a half talk. It was greatly appreciated by a gathering of some 40 members.

The meeting was held on the 10th of October was the VK6 section of the Scout Jamboree on-the-Air, some 20 Amateurs taking part.

Conditions on 40 m for October have been not so good, and have caused some disorganization of the Sunday news session. This is a pity as the W1 news is becoming very popular on Sunday morning, judging by the silence of the remainder of the club at close time. This is partly due to the very interesting technical talks by G4H after the news. Reports come from Albany in the south to Carnarvon in the north. Les 6LF in the north puts a very potent signal into this QTH with his grid modulated tx. Have not heard 6AR lately, but he is a very low power and many miles away—some 80 miles afloat.

SWL is still in bother with T.V. and deserves much credit for the way he is trying to overcome the problems of the T.V. and QTH. I understand he is contemplating an antenna farm in his backyard. Good hunting Jack, 6PH put in a good report on the T.V. and the T.V. (sorry, critical) gain in spite of interference from Wolfgang. S5O is another who has been overworked or something, and has been out of the club for some time. We understand he worked himself to the stage when he could no longer take an interest in proceedings, and was asked by "All that was should I be hindered. VIBEE, ex-SCO, was heard here one night trying to contact VK6 on c.w. but all he could manage was "TK3K. Bob 6X was on the air on 80 m after shaking the moths out of the rig. The tx did not like the new QTH, Bob? Twenty m has been open quite often lately and 6CF, 6DR and others have been heard DX'ing. 73, 62CK, per 6LS.

TASMANIA

November 1961 was really a very busy month from the point of view of our hobby. Conditions for the "CCQ" Contest on 1.5 and 3.5 were very good. The C. Section was very good indeed and much fun and enjoyment was had by those stations participating in the Contest. There was a visit to Norfolk Island which sparked off yet further activity, and it was very interesting indeed to listen on my frequency immediately after completing a most enjoyable QSO with Antk. Just to see how many we could be crammed into ten kilocycles.

The V.H.F. Group also undertook some most interesting work on the 144 Mc. band on the 14th November from Mount Wellington. Several VK3 stations were worked, over and above the northern VKTs. Mature consideration of the results of this effort could lead to the formation of a new band.

Bob YOM has been adding new experiences to his most interesting life, but the latest experience was a most unusual one, as would say clear of, namely, a shipwreck, or virtually so. Bob was on board the Sumatra when it went aground about the middle of November. Bob was very lucky and even, as you know, for his experience.

Snowy TCH and Ken TKA have been afloat also and along the way have had some of their respective enjoyments were considerable. Ken is also a very keen Tamar class yachtsman each week-end these days and we wish him increasing luck with his new-found hobby.

The North-West Coast boys operated TW1F very successfully from the Devonport Science Exhibition late in the month, and I know I express their gratitude to those Amateurs who so willingly co-operated by providing contacts for them. I have heard rumours that several of the V.H.F. boys are hard at work studying the code, with a view to sitting for their full licence in the near future. Best of luck chaps, you will find that c.w. will materially help your hobby on the bands in which you show as much interest.

Brian TZBE has been in northern Tasmania for three weeks at the direction of his employer, and no doubt he operated on the V.H.F. bands while up there and had interesting contacts with the locals and beyond up there. Ted TEJ was in Melbourne, on business, for a week or so.

In closing, I wish you all the very best for the holidays season and for the new year of 1968. 73, TZZ.

NORTH WESTERN ZONE

Sorry chaps I missed out last month, but was away on holidays and too relaxed to think about it. I was in Perth, which is a bit far when I took it out to operate, found the rough roads had shaken about six connections loose. Gave it away.

The Amateur station operating from the Scientific Exhibition at Devonport was quite a success. Although only working a No. 21 and some good contacts were made and interest aroused. The usual competition was had from surrounding exhibits including film projectors, toy trains, clockwork circuits, etc., but we got OK. Thanks to the chaps who helped out by calling us.

Spies tell me that our worthy President is dealing in a deal in valuable links in the golf. Could knock up a s.a.b. job in the time taken for a couple of 18 holes. Which brings back the old saying, "I can't see the golf, but I can't see the golf." This is a s.a.b. job, which I am assured will some day be a s.a.b. rig. I wouldn't know.

N.W. Zone stations have been very quiet lately, but with lots to talk about. I heard TDA active for a few seconds recently. TBT also appeared for a brief one. To add to the confusion, TDA seemed to be of the blue one night. It's most disturbing.

The last social meeting was an organised film show. Some movies were shown, but the show was completely stolen by a combination of the speakers with commentary on tape taken on a recent world tour by George TGC. The photography, coupled with the most interesting descriptions and comments spoke volumes for the thought and skill put into the project. Many thanks George for your thought and the use of slides, etc. We wish you every success.

Haven't seen the quad out at Pumpkin Farm lately. Hope the wind has not devastated it. Wonder if Bob HJ is in the area. Often hear you on Bob and may get you into the gossip column if I can arrange a spy on K.I.

Well, chaps, trust that the New Year holds some pleasant surprises for you all, apart from frequency cuts. 73, TMX.

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